

Archiving Websites

I would imagine that just about any organization out there will eventually amass a collection of legacy web properties. I know we have! Be it a microsite from 1998 or some fantastic (at the time) forum that has now been declared “dead” — it’s a problem. The big question being, what to do with them.

There are a few technical problems at work here. First, there is a feeling of permanence on the Internet that is hard to ignore. You want these legacy sites to live on in some form.

archive.org <http://archive.org> is a pretty good system for looking back at your main website, but its a moving target, constantly being updated with each iteration of your site. I’m talking more about preserving old web outliers. Those exhibition micro-sites, and one-off contest sites you might have produced years ago.

The next issue is that in order for these sites to live on, you need to provide some level of maintenance for them. Nearly every website these days has a database running the show, so in order for these sites to work, they need to have an open connection to that database. This means you need to continually update the application code, and do crazy things like upgrade to MySQL 5, 6, 7 and so on. What a drag!

Scrape The Site

One option we have been using here at Cooper-Hewitt is called web scraping. This is a pretty common technique that essentially creates a non-dynamic, static version of any website.

There are several ways of scraping a site, one of the simplest being the [wget](http://www.gnu.org/software/wget/) <http://www.gnu.org/software/wget/> program.

wget is a pretty simple program that comes installed on most linux distributions. You can also install it on your Mac using [Homebrew](http://mxcl.github.com/homebrew/) <http://mxcl.github.com/homebrew/> . Here is a sample command line call using wget.

```
1 $ wget -rH -Dserver.com http://www.server.com/
```

gistfile1.txt <https://gist.github.com/micahwalter/1528607#file-gistfile1-txt> **view raw** <https://gist.github.com/micahwalter/1528607/raw/gistfile1.txt>
file1-txt hosted with ❤ by **GitHub** <https://github.com>

wget works pretty well but its not really the ideal tool for the job. All it does is download web content. It's great for downloading files to your linux server (nice way to install WordPress on a new linux box) but it doesn't do much else.



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2011/12/Screen-Shot-2011-12-29-at-9.58.57-AM.png>

The httrack homepage

For scraping our sites, we chose to go with a pretty simple tool called [httrack](http://www.httrack.com/) (thanks to [Geoff Barker](http://twitter.com/Geoffmuse) at [Powerhouse](http://www.powerhousemuseum.com/)). This program (available as a command line tool for Mac) does the same thing wget does, with some added bells and whistles. The main bell being that it re-writes all of the internal hyperlinks in the site so that the archived site can be hosted on just about any domain name.


```
archive.cooperhewitt.org — bash — 147x60
87/341: piranesi.cooperhewitt.org/design/perspective-of-newdigate-candelabrum-with-cranes-from-vasi-candelabra-cippi-sarcophagi-1778/?c= (34038 bytes)
* piranesi.cooperhewitt.org/design/the-imperial-mausoleum-mausoleo-antico-from-prima-porte-di-architectture-e-prospettive-1743/?c= (33951 bytes) -
121/373: piranesi.cooperhewitt.org/design/the-imperial-mausoleum-mausoleo-antico-from-prima-porte-di-architectture-e-prospettive-1743/?c= (33951 by
* piranesi.cooperhewitt.org/design/architecttural-fantasy-with-colossal-arcaded-facade-overlooking-a-piazza-with-monuments-nd/?c=da (19606 bytes) -
131/379: piranesi.cooperhewitt.org/design/architecttural-fantasy-with-colossal-arcaded-facade-overlooking-a-piazza-with-monuments-nd/?c=da (19606 by
* piranesi.cooperhewitt.org/design/design-for-an-overdoor-decoration-with-trophies-in-the-lunette-andwinged-serpents-and-dolphins-in-spandrels-for-
135/379: piranesi.cooperhewitt.org/design/design-for-an-overdoor-decoration-with-trophies-in-the-lunette-andwinged-serpents-and-dolphins-in-spandre
* piranesi.cooperhewitt.org/design/design-of-a-vertical-wall-panel-with-maltese-cross-and-insignia-of-the-rezzonico-family-for-santa-maria-del-prio
rato-design-for-decorative-relief-panel-on-the-right-hand-stela-of-the-south-wall-piazzale-de-cavalieri-di-malta-rome-176467/?c=da (19630 bytes) -
137/379: piranesi.cooperhewitt.org/design/design-of-a-vertical-wall-panel-with-maltese-cross-and-insignia-of-the-rezzonico-family-for-santa-maria-d
el-priorato-design-for-decorative-relief-panel-on-the-right-hand-stela-of-the-south-wall-piazzale-de-cavalieri-di-malta-rome-176467/?c=da (19630 by
* piranesi.cooperhewitt.org/design/imaginary-architecttural-composition-with-inscription-from-sallust-in-osservazioni-sopra-la-lettre-de-m-mariette-
148/379: piranesi.cooperhewitt.org/design/imaginary-architecttural-composition-with-inscription-from-sallust-in-osservazioni-sopra-la-lettre-de-m-ma
144/379: piranesi.cooperhewitt.org/design/roman-ionic-capitals-plate-20-in-della-magnificenze-ed-architettura-de-romani-1761/?c=da (19557 bytes) -
* piranesi.cooperhewitt.org/design/the-imperial-mausoleum-mausoleo-antico-from-prima-porte-di-architectture-e-prospettive-1743/?c=da (19501 bytes)
148/379: piranesi.cooperhewitt.org/design/the-imperial-mausoleum-mausoleo-antico-from-prima-porte-di-architectture-e-prospettive-1743/?c=da (19501
* piranesi.cooperhewitt.org/design/architecttural-fantasy-with-colossal-arcaded-facade-overlooking-a-piazza-with-monuments-nd/?c=dd (21591 bytes) -
158/379: piranesi.cooperhewitt.org/design/architecttural-fantasy-with-colossal-arcaded-facade-overlooking-a-piazza-with-monuments-nd/?c=dd (21591 by
* piranesi.cooperhewitt.org/design/autograph-letter-from-piranesi-to-charles-townley-with-drawing-of-the-warwick-vase-accompanied-by-dimensions-3-a
152/379: piranesi.cooperhewitt.org/design/autograph-letter-from-piranesi-to-charles-townley-with-drawing-of-the-warwick-vase-accompanied-by-dimensi
158/379: piranesi.cooperhewitt.org/design/design-for-a-wall-panel-in-the-form-of-a-rococo-shield-with-sconces-to-either-side-nd/?c=dd (21637 bytes)
* piranesi.cooperhewitt.org/design/design-for-an-overdoor-decoration-with-trophies-in-the-lunette-andwinged-serpents-and-dolphins-in-spandrels-for-
161/379: piranesi.cooperhewitt.org/design/design-for-an-overdoor-decoration-with-trophies-in-the-lunette-andwinged-serpents-and-dolphins-in-spandre
* piranesi.cooperhewitt.org/design/design-of-a-vertical-wall-panel-with-maltese-cross-and-insignia-of-the-rezzonico-family-for-santa-maria-del-prio
rato-design-for-decorative-relief-panel-on-the-right-hand-stela-of-the-south-wall-piazzale-de-cavalieri-di-malta-rome-176467/?c=dd (21615 bytes) -
163/379: piranesi.cooperhewitt.org/design/design-of-a-vertical-wall-panel-with-maltese-cross-and-insignia-of-the-rezzonico-family-for-santa-maria-d
el-priorato-design-for-decorative-relief-panel-on-the-right-hand-stela-of-the-south-wall-piazzale-de-cavalieri-di-malta-rome-176467/?c=dd (21615 by
* piranesi.cooperhewitt.org/design/autograph-letter-from-piranesi-to-charles-townley-with-drawing-of-the-warwick-vase-accompanied-by-dimensions-3-a
176/379: piranesi.cooperhewitt.org/design/autograph-letter-from-piranesi-to-charles-townley-with-drawing-of-the-warwick-vase-accompanied-by-dimensi
183/379: piranesi.cooperhewitt.org/design/design-for-a-wall-panel-in-the-form-of-a-rococo-shield-with-sconces-to-either-side-nd/?c=dd (18701 bytes)
* piranesi.cooperhewitt.org/design/diverse-maniere-open-to-furniture-including-a-side-table-designed-for-cardinal-rezzonico-1769/?c=dd (18790 bytes)
187/379: piranesi.cooperhewitt.org/design/diverse-maniere-open-to-furniture-including-a-side-table-designed-for-cardinal-rezzonico-1769/?c=dd (1879
* piranesi.cooperhewitt.org/design/elevation-of-piranesi-own-funery-candelabrum-with-putti-from-vasi-candelabra-cippi-sarcophagi-1778/?c=dd (190
188/379: piranesi.cooperhewitt.org/design/elevation-of-piranesi-own-funery-candelabrum-with-putti-from-vasi-candelabra-cippi-sarcophagi-1778/?c=
* piranesi.cooperhewitt.org/design/perspective-of-newdigate-candelabrum-with-cranes-from-vasi-candelabra-cippi-sarcophagi-1778/?c=dd (19037 bytes)
189/379: piranesi.cooperhewitt.org/design/perspective-of-newdigate-candelabrum-with-cranes-from-vasi-candelabra-cippi-sarcophagi-1778/?c=dd (19037
* piranesi.cooperhewitt.org/design/diverse-maniere-open-to-furniture-including-a-side-table-designed-for-cardinal-rezzonico-1769/?c=dd (14089 bytes)
200/379: piranesi.cooperhewitt.org/design/diverse-maniere-open-to-furniture-including-a-side-table-designed-for-cardinal-rezzonico-1769/?c=dd (1408
* piranesi.cooperhewitt.org/design/elevation-of-piranesi-own-funery-candelabrum-with-putti-from-vasi-candelabra-cippi-sarcophagi-1778/?c=dd (142
201/379: piranesi.cooperhewitt.org/design/elevation-of-piranesi-own-funery-candelabrum-with-putti-from-vasi-candelabra-cippi-sarcophagi-1778/?c=
* piranesi.cooperhewitt.org/design/perspective-of-newdigate-candelabrum-with-cranes-from-vasi-candelabra-cippi-sarcophagi-1778/?c=dd (14256 bytes)
202/379: piranesi.cooperhewitt.org/design/perspective-of-newdigate-candelabrum-with-cranes-from-vasi-candelabra-cippi-sarcophagi-1778/?c=dd (14256
206/379: piranesi.cooperhewitt.org/design/roman-ionic-capitals-plate-20-in-della-magnificenze-ed-architettura-de-romani-1761/?c=dd (14225 bytes) -
* piranesi.cooperhewitt.org/design/the-imperial-mausoleum-mausoleo-antico-from-prima-porte-di-architectture-e-prospettive-1743/?c=dd (14169 bytes)
209/379: piranesi.cooperhewitt.org/design/the-imperial-mausoleum-mausoleo-antico-from-prima-porte-di-architectture-e-prospettive-1743/?c=dd (14169
227/385: piranesi.cooperhewitt.org/influence/design-for-a-table-with-monopods-plate-38-in-recueil-des-decorations-interieures/?c= (17675 bytes) - 0
251/405: piranesi.cooperhewitt.org/influence/settee-in-the-egyptian-taste-from-the-egyptian-room-duchess-street-london-ca-1802/?c= (17604 bytes) - 0
264/411: piranesi.cooperhewitt.org/influence/selected-perspective-of-projected-mausoleum-for-frederick-prince-of-wales-1752/?c=ia (11566 bytes) - 0
274/411: piranesi.cooperhewitt.org/influence/design-for-a-table-with-monopods-plate-38-in-recueil-des-decorations-interieures/?c=io (8634 bytes) - 0
275/411: piranesi.cooperhewitt.org/influence/settee-in-the-egyptian-taste-from-the-egyptian-room-duchess-street-london-ca-1802/?c=io (8563 bytes) - 0
283/411: piranesi.cooperhewitt.org/influence/design-for-a-table-with-monopods-plate-38-in-recueil-des-decorations-interieures/?c=ih (14879 bytes) - 0
288/411: piranesi.cooperhewitt.org/influence/selected-perspective-of-projected-mausoleum-for-frederick-prince-of-wales-1752/?c=ih (14726 bytes) - 0
291/411: piranesi.cooperhewitt.org/influence/settee-in-the-egyptian-taste-from-the-egyptian-room-duchess-street-london-ca-1802/?c=ih (14808 bytes)
409/411: piranesi.cooperhewitt.org/images/Large/GandyWebSite.jpg (262705 bytes) - 0K
HTTrack Website Copier 3.44-1 mirror complete in 0 minutes 35 seconds : 410 links scanned, 409 files written (12285105 bytes overall) [12403203 byt
es received at 24177 bytes/sec], 1.9 requests per connection
(No errors, 0 warnings, 0 messages)
Done.
Thanks for using HTTrack!
Lithium:archive.cooperhewitt.org micah$
```

<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2011/12/htrack.png>

Here is httrack running in my Mac's terminal.

Hosting A Scraped Site

Once you have scraped a site, it probably makes sense to move it somewhere for safe keep-
ing. We had lots of sites on lots of domains. It didn't really make sense after years of producing
these sites with different methodologies. So, we decided to create archive.cooperhewitt.org
and place each scraped site as a sub-folder of this domain.

Initially I thought it would be really nice to host these static sites on [Amazon's S3](http://aws.amazon.com/s3)
 . I know it's possible to do this, but I found that many of the pages wouldn't load cor-
rectly. I'm still interested in S3 as an option for this as it's sort of the perfect hardware for the
job (is it really hardware?) but instead I chose to spin up a micro instance on [EC2](http://aws.amazon.com/ec2)

zon.com/ec2 and host the sites there.

Here's an example of one of our scraped sites —

<http://archive.cooperhewitt.org/campana> http://archive.cooperhewitt.org/campana

301s

It's pretty standard practice on the web to create 301 redirects for sites you are moving to a new domain. I was able to do this pretty easily using an .htaccess file and the following commands.

```
1 RewriteEngine on
2 RewriteCond %{HTTP_HOST} ^campana.cooperhewitt.org [NC]
3 RewriteRule ^(.*)$ http://archive.cooperhewitt.org/campana/campana.cooperhewitt.org

gistfile1.txt https://gist.github.com/micahwalter/1571750#file-gist- view raw https://gist.github.com/micahwalter/1571750/raw/gistfile1.txt
file1-txt hosted with ❤ by GitHub https://github.com
```

This allows you to browse the site by going to the original URL at <http://campana.cooperhewitt.org> http://campana.cooperhewitt.org or any of its permalinks like <http://campana.cooperhewitt.org/about.html> http://campana.cooperhewitt.org/about.html

The Downsides

As with anything, there are downsides to using this technique. The main one being no more interactivity. If your website had a commenting feature built in, it won't work anymore. If it ran off a CMS like WordPress, you won't be able to log in and make edits to your content. Everything is now static HTML, forever. Also, httrack won't do it all. It hiccups on some types of URLs depending on the underlying structure/technology. I found this to be a small problem with things like roll over images and dynamic hyperlinks (especially links with ? marks in them). But most of these issues can be resolved with a little cleanup.

One Final Step

Since you are scraping the site and turning it into static html, it does make sense to make a real archive of your original site files and any attached database. I simply copied all the files in our /var/www directory to an external hard drive and did a mass MySQL dump to the same

drive. If I ever really need to resurrect one of the sites, I have everything I need sitting on a shelf in cold storage.

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged apache* <http://labs.cooperhewitt.org/tag/apache/>, *archiving* <http://labs.cooperhewitt.org/tag/archiving/>, *httrack* <http://labs.cooperhewitt.org/tag/httrack/>, *permanence* <http://labs.cooperhewitt.org/tag/permanence/>, *web* <http://labs.cooperhewitt.org/tag/web/> *on January 6, 2012* [<http://labs.cooperhewitt.org/2012/archiving-websites/>] *by micah* <http://labs.cooperhewitt.org/author/micah/> .

Introducing Cooper-Hewitt Labs

Welcome to Cooper-Hewitt Labs.

The Labs is a place where you can discover what is going on behind the scenes in digital & emerging media at the Cooper-Hewitt. Now you might well be asking why the Cooper-Hewitt needs another blog – we’ve got the popular [design blog](http://www.cooperhewitt.org/blog) on our site already – so here’s why:

It is going to get noisy here. It might even get a bit messy. And that’s the point.

(There’s a reason we have a [tanuki](http://www.onmarkproductions.com/html/tanuki.shtml) as an unofficial mascot for the Labs.)

There’s going to be a lot of technical posts in amongst others that teardown how experiments have performed. And some speculations, ideas, and things we’d like to do, too.

The Cooper-Hewitt is undergoing a transformation with a [major rebuilding project](http://www.cooperhewitt.org/redesign). As a result digital content development, digital outreach, and the integration of digital into the fabric and visitor experience of the new building, are all top of mind for us here. This means that there is a lot of experimentation and rapid change, and in the spirit of the broader [Smithsonian New Media & Web Strategy](http://smithsonian-webstrategy.wikispaces.com/), we are going to be doing a lot of ‘thinking aloud’.

We’d love your feedback and input as we go.

So who are ‘we’?

Seb Chan is the Director of Digital & Emerging Media. He is new here and before moving to NYC lived in Sydney and did many many things at the [Powerhouse Museum](http://www.powerhouse-museum.com). He misses good coffee, the [cricket](http://www.espncricinfo.com/), and his previous life in electronic music. You can find out software he prefers to run over at [Usesthis](http://seb.chan.usesthis.com/). He’ll be writing about specific projects here whilst addressing more meta issues over on his long running museum technology blog, [Fresh & New](http://www.freshandnew.org).

[Micah Walter](http://micahwalter.tumblr.com) <http://micahwalter.tumblr.com> is the Webmaster. He likes tacos and [Drupal](http://drupal.org) <http://drupal.org> and you'll be hearing a lot about web technologies from him. Before joining the Cooper-Hewitt he received his MFA in Photographic and Electronic Media from [MICA](http://mica.edu) <http://mica.edu> (no relation). Before that he lived on an [island](http://www.dominica.dm) <http://www.dominica.dm> in the West Indies, and before that he claims to have been a photojournalist in the Middle East, but says all the photographic evidence is on some hard drive in his closet.

Shamus Adams is Cooper-Hewitt's A/V guy. He enjoys using cameras and microphones to capture all the words, actions, and objects that surround design and design thinking. Before joining Cooper-Hewitt he was the Assistant Studio Director for Recording for the Blind & Dyslexic in Princeton, New Jersey, Education Director of WYOU Community Television in Madison, WI, and Production Associate at WCSH in Portland, ME.

Katie Shelly is a creative/technology polymath who's obsessed with collecting skills: video skills, animation skills, web skills, coding skills. She loves to [draw](http://katieshelly.com/2d/monsters.html) <http://katieshelly.com/2d/monsters.html>, make [graphics](http://katieshelly.com/2d/leftforum2012.html) <http://katieshelly.com/2d/leftforum2012.html>, make [videos](http://katieshelly.com/moving-image/see.html) <http://katieshelly.com/moving-image/see.html>, and read tons of [design/tech/art blogs](http://katieshelly.com/more/reader.html) <http://katieshelly.com/more/reader.html>. Before working at Cooper-Hewitt, she [fixed computers & sold gear](http://www.tekserve.com/) <http://www.tekserve.com/> for a living and before that she went to [Wesleyan University](http://en.wikipedia.org/wiki/Wesleyan_University) http://en.wikipedia.org/wiki/Wesleyan_University where she thought about cultural theory, queer politics, and how to collaborate with lots of smart people.

Katie drew the header for the blog.

This entry was posted in [CH 3.0](http://labs.cooperhewitt.org/category/ch-3-0/) <http://labs.cooperhewitt.org/category/ch-3-0/> and tagged [Hello world](http://labs.cooperhewitt.org/tag/hello-world/) <http://labs.cooperhewitt.org/tag/hello-world/> on [January 22, 2012](http://labs.cooperhewitt.org/2012/introducing-cooper-hewitt-labs/) [<http://labs.cooperhewitt.org/2012/introducing-cooper-hewitt-labs/>] by [Seb Chan](http://labs.cooperhewitt.org/author/seb/) <http://labs.cooperhewitt.org/author/seb/>.

Moving to the Fog

When people have asked me where we host our website, I have usually replied with “it’s complicated.”

Last week we made some serious changes to our web infrastructure. Up until now we have been running most of our web properties on servers we have managed ourselves at [Rack-space](http://rackspace.com) <http://rackspace.com>. These have included dedicated physical servers as well as a few cloud based instances. We also have a couple of instances running on [Amazon EC2](http://aws.amazon.com) <http://aws.amazon.com>, as well as a few properties running at the Smithsonian Mothership in Washington DC.

For a long time, I had been looking for a more seamless and easier to manage solution. This was partially achieved when I moved the main site from our old dedicated server to a cloud-based set of instances behind a Rackspace load balancer. It seemed to perform pretty well, but still I was mostly responsible for it on my own.

PHPFog



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/01/phpfog.png>

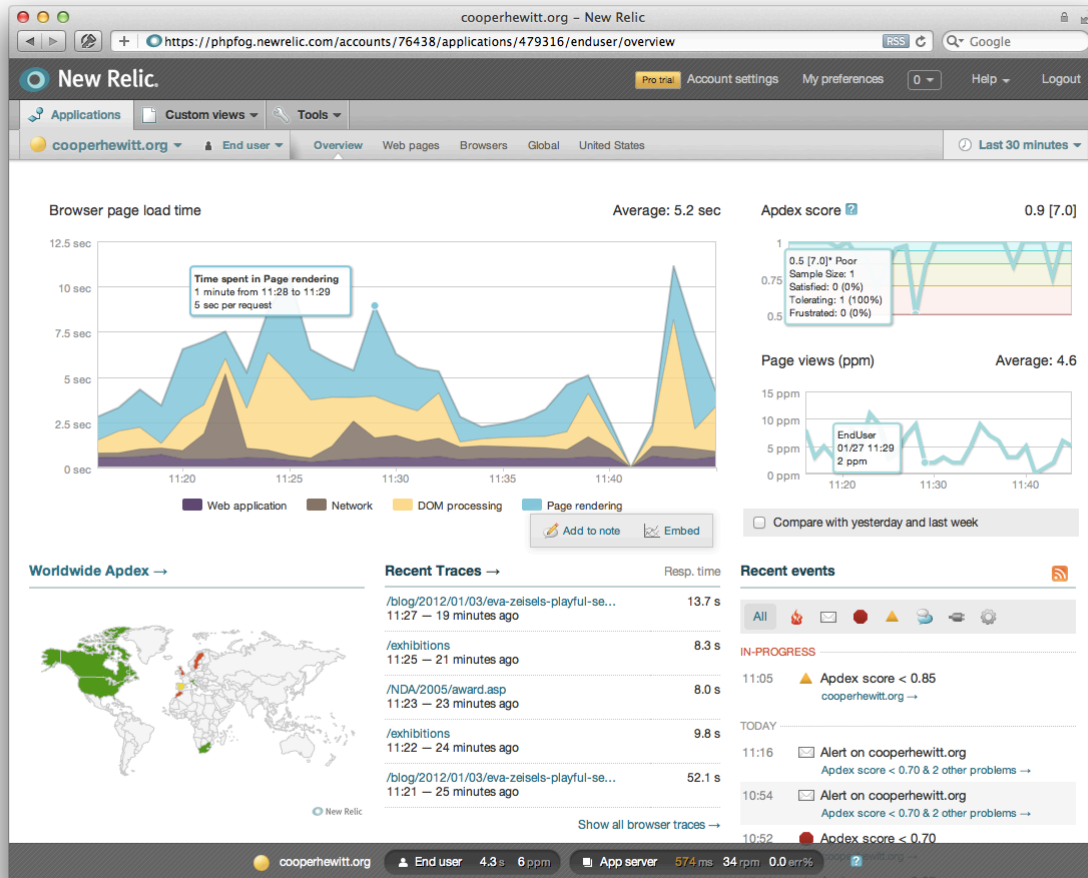
PHPFog can be used to easily scale your web-app by adding multiple app servers

Eventually I discovered a service built on top of Amazon EC2 known as [PHPFog](http://phpfog.com) <http://phpfog.com>. This Platform as a Service (PaaS) is designed to allow people like myself to easily develop and deploy PHP based web apps in the Cloud. Essentially, what PHPFog does is set up an EC2 instance, configured and optimized by their own design. This is placed behind their own set of load balancers, Varnish Cache servers and other goodies, and connected up with an [Amazon RDS](http://aws.amazon.com/rds) <http://aws.amazon.com/rds> MySQL server. They also give you a hosted [Git](http://git-scm.com/) <http://git-scm.com/> repository, and in fact, Git becomes your only connection to the file system. At first this seemed very

un-orthodox. No SSH, no FTP, nothing... just Git and PHPMyAdmin to deal with the database. However, I spent a good deal of time experimenting with PHPFog and after a while I found the workflow to be really simple and easy to manage. Deployment is as easy as doing a Git Push, and the whole thing worked in a similar fashion to [Heroku.com](http://heroku.com), the popular [Ruby on Rails](http://rubyonrails.org/) PaaS.

What's more is that PHPFog, being built on EC2 was fairly extensible. If I wanted to, I could easily add an [ElastiCache](http://aws.amazon.com/elasticache/) server, or my own dedicated [RDS](http://aws.amazon.com/rds) server. Basically, through setting up security groups which allow communication to PHPFog's instances, I am able to connect to just about anything that Amazon AWS has to offer.

I continued to experiment with PHPFog and found some additional highlights. Each paid account comes with a free [NewRelic](http://newrelic.com) monitoring account. NewRelic is really great as it offers a much more comprehensive monitoring system than many of the typical server alerting and monitoring apps available today. You can really get a nice picture of where the different bottlenecks are happening on your app, and what the real "end user" experience is like. In short, NewRelic was the icing on the cake.



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/01/newrelic.png>

Our NewRelic Dashboard

So, last week, we made the switch and are now running our main cooperhewitt.org <http://cooperhewitt.org> site on "The Fog." We have also been running this blog on the same instance. In fact, if you are really interested, you can check out our NewRelic stats for the last three hours in the "Performance <http://labs.cooperhewitt.org/performance> menu tab!" It took a little tweaking to get our NewRelic alerts properly configured, but they seem to be working pretty seamlessly now.

Here's a nice video explaining how AppFog/PHPFog works.

As you can see, we've got a nice [little stack](http://builtwith.com/cooperhewitt.org) <http://builtwith.com/cooperhewitt.org> running here and all easily managed with minimal staff resource.

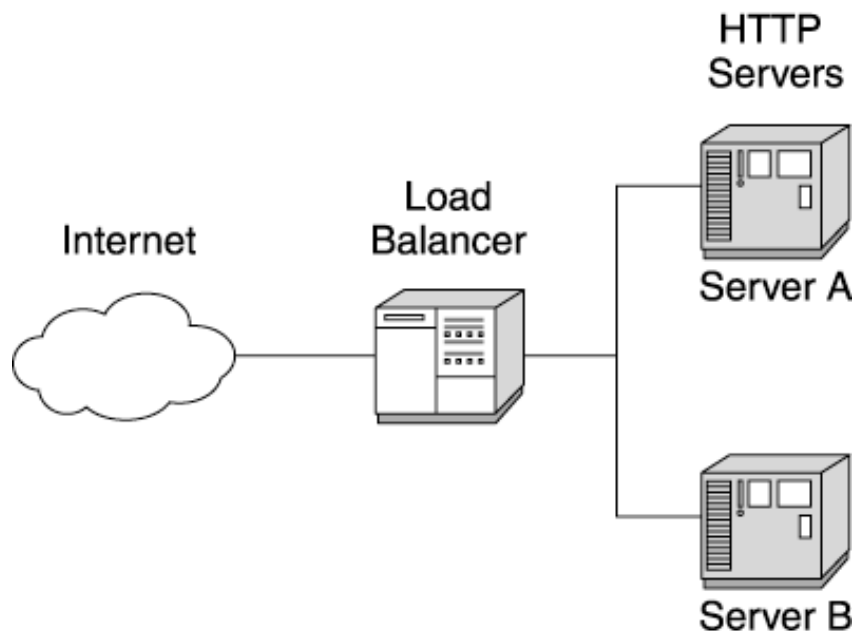
And here's a somewhat different Fog altogether.

(Yes we are a little [John Carpenter](http://www.imdb.com/name/nm0000118/) obsessed here)

This entry was posted in [Backends](http://labs.cooperhewitt.org/category/backends/)*,* [CH 3.0](http://labs.cooperhewitt.org/category/ch-3-0/) *and tagged* [aws](http://labs.cooperhewitt.org/tag/aws/)*,* [cloud](http://labs.cooperhewitt.org/tag/cloud/)*,* [ec2](http://labs.cooperhewitt.org/tag/ec2/)*,* [geek](http://labs.cooperhewitt.org/tag/geek/)*,* [paas](http://labs.cooperhewitt.org/tag/paas/)*,* [php](http://labs.cooperhewitt.org/tag/php/)*,* [servers](http://labs.cooperhewitt.org/tag/servers/)*,* [tech](http://labs.cooperhewitt.org/tag/tech/) *on* [February 1, 2012](http://labs.cooperhewitt.org/2012/moving-fog/) *by* [micah](http://labs.cooperhewitt.org/author/micah/)*.*

Media servers and some open sourcedness

We use [Amazon S3](http://aws.amazon.com/s3) http://aws.amazon.com/s3 for a good portion of our media hosting. It's a simple and cost effective solution for serving up assets big and small. When we moved initially to Drupal 6.x (about a year ago) I wanted to be sure that we would use S3 for as many of our assets as possible. This tactic was partly inspired by wanting to keep the Drupal codebase nice and clean, and also to allow us to scale horizontally if needed (multiple app servers behind a load balancer).



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/02/01fig22.gif>

Horizontal Scaling

So in an attempt to streamline workflows, we modified this [amazon_s3](http://drupal.org/project/amazon_s3) http://drupal.org/project/ama- zon_s3 Drupal module a little. The idea was to allow authors to easily use the Drupal node editor to upload their images and PDFs directly to our S3 bucket. It would also rewrite the URLs to pull the content from our [CloudFront CDN](http://aws.amazon.com/cloudfront) http://aws.amazon.com/cloudfront. It also sorts your images into folders based on the date (a-la-Wordpress).

File attachments

Changes made to the attachments are not permanent until you save this post. The first "listed" file will be included in RSS feeds.

| | Delete | List | Description | Size |
|---|--------------------------|--------------------------|---|----------|
| + | <input type="checkbox"/> | <input type="checkbox"/> | logo.png http://cdn.cooperhewitt.org/2012/02/09/logo.png | 22.05 KB |

ATTACH NEW FILE:

Choose File

no file selected

Attach

<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/02/uploader.jpg>

Our fork of amazon_s3 rewrite the URL for our CDN, and sorts into folders by date.

I've [opened sourced](https://github.com/cooperhewitt/amazon_s3) https://github.com/cooperhewitt/amazon_s3 that code now which is simply a fork of the amazon_s3 module. It works pretty well on Drupal 6.x. It has an issue where it uploads assets with some incorrect meta-data. It's really only a problem for uploaded PDFs where the files will download but won't open in your browser. This has to do with the S3 metadata tag of application/octet-stream vs. application/pdf. All in all I think its a pretty useful module.

As we move towards migrating to Drupal 7, I have been doing some more research about serving assets via S3 and CloudFront. Additionally, it seems that the Drupal community have developed some new modules which should help streamline a few things

Create Distribution Wizard Cancel

DISTRIBUTION TYPE DISTRIBUTION DETAILS REVIEW

Select a delivery method then select an origin type. For download delivery, you can configure an Amazon S3 origin or your own custom origin. Streaming distributions must use Amazon S3 as an origin. [Learn More](#)

Delivery Method: ☒ Download ☐ Streaming

☐ Amazon S3 Origin

☒ Custom Origin

Origin DNS Name:

Protocol Policy: ☒ HTTP Only ☐ Match Viewer

HTTP Port:

HTTPS Port:

Continue

<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/02/Screen-Shot-2012-02-09-at-1.29.21-PM.png>

Create a CloudFront distribution for you whole site using a custom origin

As of a couple years ago Amazon's CloudFront CDN allows you to use a custom origin. This is really great as you can simply tell it to pull from your own domain rather than an S3 bucket.

So for example, I set this blog up with a CloudFront distribution that pulls direct from <http://labs.cooperhewitt.org> <http://labs.cooperhewitt.org>. The resultant distribution is at <http://d2y3kexd1yg34t.cloudfront.net> <http://d2y3kexd1yg34t.cloudfront.net>. If you go to that URL you should see a mirror of this site. Then all we have to do is install a [plugin for WordPress](#) <http://wordpress.org/extend/plugins/w3-total-cache/> to replace static asset URLs with the CloudFront URL. You might notice this in action if you inspect the URL of any images on the site. You can of course add a CNAME to make the CloudFront URL prettier, but it isn't required.

On the Drupal end of things, there is a simple module called [CDN](http://drupal.org/project/cdn) that does the same thing as we are doing here via the WordPress [W3TC](http://wordpress.org/extend/plugins/w3-total-cache/) plugin. It simply replaces static asset files with your CloudFront domain. Additionally, I see there is now a new Drupal module called [amazons3](http://drupal.org/project/amazons3) (note the lack of the underscore). This module is designed to allow Drupal to replace it's default file system with your S3 bucket. So, when a user uploads files through the Drupal admin interface (which normally sends files to sites/default/files on your local server) files automatically wind up in your S3 bucket.

I haven't gotten this to work as of yet, but I think it's a promising approach. Using this setup, you could maintain a clean and scalable Drupal codebase, keeping all of your user uploaded assets on an S3 bucket without much change to the standard workflow within the Drupal backend. NICE!

This entry was posted in [Backends](http://labs.cooperhewitt.org/category/backends/), [CH 3.0](http://labs.cooperhewitt.org/category/ch-3-0/) and tagged [amazon](http://labs.cooperhewitt.org/tag/amazon/), [aws](http://labs.cooperhewitt.org/tag/aws/), [cdn](http://labs.cooperhewitt.org/tag/aws/), [cloudfront](http://labs.cooperhewitt.org/tag/cdn/), [drupal](http://labs.cooperhewitt.org/tag/cloudfront/), [s3](http://labs.cooperhewitt.org/tag/drupal/), [scale](http://labs.cooperhewitt.org/tag/s3/), [scaleability](http://labs.cooperhewitt.org/tag/scale/), [wordpress](http://labs.cooperhewitt.org/tag/scaleability/) on February 9, 2012 [<http://labs.cooperhewitt.org/2012/media-servers-open-sourceness/>] by [micah](http://labs.cooperhewitt.org/author/micah/).

Upending ticketing

One of the opportunities we have right now is to challenge the conventional wisdom that back-of-house systems need to *always* be 'enterprise grade'. As we are currently in renovation mode and our exhibitions and programs are happening offsite and around the city, we have the chance to rethink and experiment with different systems to perform common functions such as ticketing. In so doing we are looking at the way different systems shape visitor/staff interactions and are also able to refocus by choosing systems on their user experience rather than their 'backwards compatibility'.



A recent change we've made is to use [EventBrite](http://www.eventbrite.com) <http://www.eventbrite.com> for ticketing, replacing a system that despite being tightly integrated with our donor management system placed an inscrutable purchasing interface between the customer and their desired tickets. It isn't a permanent solution (what is these days?), but more the opening of a 'possibility space'.

So how is it going?

Our ticket selling *velocity* has increased – events sell more quickly – and we’ve been able to integrate ticket selling directly into our email marketing, as well. When ticket price points have reached capacity we’ve used automatic waitlisting and we’ve even been able to collect donations as purchasers buy tickets, and we’ve also been able to issue refunds easily when required. Most importantly the customer experience of purchasing tickets has vastly improved.



Last night, we had our first trial of a medium size event check-in. Using the [EventBrite iPhone Check-In App](http://www.eventbrite.com/t/entry-manager-app-iphone) <http://www.eventbrite.com/t/entry-manager-app-iphone> we were able to run a cashless door using staff members’ iPhones to check everyone in quickly. Checkins were done via ticket scans and where people had forgotten their printed ticket, by name. Each iPhone synced to the master list meaning that we could easily ‘add extra ticket staff’ to process more people if we had a logjam. This had a nice side effect of freeing up staff time to direct visitors to our roving iPads for quick signup to our mailing list on their way into the venue.

But the purpose of deploying lightweight technologies as a replacement for gargantuan enterprise systems is not just about improving visitor experience, or streamlining back-of-house operations – it is also about positioning us to reconceptualise the type of entry/ticketing experience we might want for our new building and galleries when they are completed.

If it is possible to do the entry experience to events in a seamless mannner with only mobile devices, can a museum jettison its ticket counter in a redesign? It also makes us ask ourselves to be specific about the other functions ticket counters might serve.

This entry was posted in [Backends](http://labs.cooperhewitt.org/category/backends/) *and tagged* [design](http://labs.cooperhewitt.org/tag/design/), [POS](http://labs.cooperhewitt.org/tag/pos/), [ticketing](http://labs.cooperhewitt.org/tag/ticketing/), [UI](http://labs.cooperhewitt.org/tag/ui/), [UX](http://labs.cooperhewitt.org/tag/ux/), [visitor experience](http://labs.cooperhewitt.org/tag/visitor-experience/) *on February 10, 2012* [<http://labs.cooperhewitt.org/2012/upending-ticketing/>] *by* [Seb Chan](http://labs.cooperhewitt.org/author/seb/)

Deploying 129 iPads to NYC Schools

One of the exciting projects we have underway is deploying 129 iPads to teachers in New York City public schools. As you can imagine, this is a somewhat challenging project and not just from a technical perspective.

This is happening as part of a US Department of Education funded project called Arts Achieve. Here's Katie Shelly, who is handling the tech for the project.

What is i3 and Arts Achieve?

i3, which stands for [Investing In Innovation](http://www2.ed.gov/programs/innovation/index.html), is a new grant program of the U.S. Department of Education. Established in 2009 as part of the [American Recovery and Reinvestment Act](http://www.recovery.gov/About/Pages/The_Act.aspx), the i3 Fund provides competitive grants to cultural and educational organizations to expand innovative practices that will have an impact on improving education by advancing student achievement, student growth, closing achievement gaps, decreasing dropout rates, increasing graduation, college enrollment and/or college completion rates.

In 2010, Studio in a School was awarded an i3 grant in conjunction with five partner institutions – including Cooper-Hewitt. The winning entry, called [Arts Achieve](http://data.ed.gov/grants/investing-in-innovation/applicant/15523), proposed the development of an ambitious pilot program in New York City public schools to improve student achievement in the arts by building high-quality, digitally replicable arts assessments, along with a corresponding digital community and resource kit. Each partnering organization brings a different expertise to the development of the pilot.

[Carnegie Hall](http://www.carnegiehall.org/), [The 92nd Street Y](http://www.92y.org/Uptown/School-of-the-Arts/Harkness-Dance-Center/Dance-Education-Laboratory-DEL.aspx), [ArtsConnection](http://www.artsconnection.org/) and [Studio in a School](http://www.studioinaschool.org/) bring music, dance, theatre and visual art expertise respectively. Cooper-Hewitt brings expertise on the [innovative use of technology](http://www.youtube.com/playlist?list=PL5275BB9CEF4F5339&feature=plcp) for education and [design thinking expertise](http://www.youtube.com/watch?v=jIXSuZg2awA), and The [NYC Department of Education](http://schools.nyc.gov/default.htm) brings expertise in [curricula](http://schools.nyc.gov/offices/teachlearn/arts/blueprint.html), state and national standards, and very importantly, the ability for us to connect with public schools. We're currently in year 2 of 5, which means the Arts Achieve program is up and running– with 43 participating schools, hundreds of educational professionals and thousands of students participating. Our online com-

munity, powered by [Ning](http://www.ning.com) <http://www.ning.com>, is abuzz with about 200 members who use the space to share lesson plans, media, resources, and feedback, bringing hundreds of individuals with different areas of niche expertise together in a single network focused on developing and implementing high-quality assessments for the arts.

How did you come to select iPads as the most appropriate technology? What can they do that others cannot?

We considered laptops, PC tablets, linking up peoples' phones.. we even considered commissioning an elaborate arts assessment booth or kiosk (we jokingly call this wild idea "the laser box").

The iPod touch and smartphones were cheap, but had too small of a screen for good collaboration.



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/02/boy-using-laptop.jpg>

Laptop user's "don't bug me" body language.

Laptops are highly capable but too individual-oriented to cultivate the feedback-rich classroom environment we wanted. When people are working on a laptop, it sends out this mes-

sage that says: "I'm working-don't bug me!" We wanted technology that would set the stage for collaboration, teamwork and most importantly, many layers of feedback- from student to student, teacher to student, outside the school to inside, and so on. Constant feedback flow is a big philosophical pillar in the project.

The kiosk idea, though tempting for the ability to infinitely customize for our project, was too pricey to be nationally replicable. A key goal of our pilot is to create something that can be replicated elegantly and affordably in any public school classroom in the United States. So for that reason we decided to adapt existing technologies rather than develop something proprietary.

The only thing we rely on schools to provide is an Internet connection. Everything you need to participate is included our package. The package has 3 customized iPads, wireless access point with 14ft ethernet cable, [speaker/pico projector combo dock](http://www.wowwee.com/en/special/slice) (chosen for its wonderful lack of hookup cables) some styli, [iRig mic](http://www.informationweek.com/news/personal-tech/digital-audio/229401607), and durable iPad cases.



iPad users' 'hey, let's explore together!' body language

We liked iPads because we know that many teachers and students are already familiar and comfortable with the interface. The touchscreen was a big thing for us, because the flat,

“swipey” interface fosters body language that says “come play with me, let’s explore!” We could imagine a bunch of kids gathered around a video or a group game, working together. And we had seen [compelling reports of classrooms around the country using iPad](http://www.youtube.com/watch?feature=player_embedded&v=oYLirypK_Yo) http://www.youtube.com/watch?feature=player_embedded&v=oYLirypK_Yo to do just that, which confirmed our hunch that this was the

best way to go.

What Apps did you select? What criteria did you use?

Our custom iPad image has 90 apps pre-loaded for the classroom. We asked our partner institutions in the different arts disciplines to suggest high-quality apps for their disciplines.

We looked for apps that we could picture a group of kids using together collaboratively.

There’s a beautiful one called [Visible Body](http://itunes.apple.com/us/app/visible-body-for-ipad-2-3d/id446207961?mt=8) http://itunes.apple.com/us/app/visible-body-for-ipad-2-3d/id446207961?mt=8

that lets you zoom and spin around the entire human anatomy—bones, muscles, ligaments. I could see that engaging a group of students trying to draw from life or learning to understand their bodies through dance. I also like one called [Educreations](http://itunes.apple.com/us/app/educreations-interactive-whiteboard/id478617061?mt=8) http://itunes.apple.com/us/app/educreations-interactive-whiteboard/id478617061?mt=8, which lets you draw on the screen while speaking/explaining, which you could imagine being useful for theater students planning out [blocking](http://en.wikipedia.org/wiki/Blocking_(stage)) http://en.wikipedia.org/wiki/Blocking_(stage) while speaking cues, and perhaps using the recorded

video to explain their vision to others. A drawing teacher could make a demo video to open a lesson on 3-D shading techniques, or as a tool to support students in need of extra help.

We included several video and photo editing apps to help teachers record and share what’s happening in their classroom in the Arts Achieve online community too.

If an app required elaborate setup or login, we nixed it. We operated on the assumption that since teachers are always extremely pressed for time and juggling many demands, there’s no time for anything that takes more than a few taps to get up and running.

What were the challenges in setting the iPads up for use across so many different schools?

A huge issue for teachers trying to harness the educational power of technology is simply getting online. Find the right wi-fi network, track down the IT guy to get the password, enter a 15 character password... enter a proxy setting, possibly another password in the browser... and repeat that process for multiple devices.... By now your 40 minute lesson time is halfway over.

A huge win for us was the ability to pre-configure these iPads for instant web access. All the teacher has to do is plug in an [Airport Express](http://www.apple.com/airportexpress/) brick to the outlet & the nearest ethernet jack. They turn on their iPads, which are pre-programmed to look for the Airport and pre-configured with DOE proxy settings. They plug in the brick, turn on the iPads, and they're online. A little bit of configuration legwork from us will save hours of accumulated time for these teachers.

Each iPad has the same disk image that has been custom configured and optimized for the project. They're pre-loaded with networking settings, relevant bookmarks for the Ning network, wallpaper with our logo and even [keyboard shortcuts](http://www.huffingtonpost.com/2011/10/14/ios-5-keyboard-shortcuts_n_1011400.html) that reflect the Arts Achieve vocabulary. The iPads are centrally tethered and controlled using [AirWatch](http://www.air-watch.com/), so we can see when and how they're being used, where they are, push out new apps as we learn about them, and block whatever latest new distracting game is out there. We can also troubleshoot problems remotely, which is huge because the test schools are far-flung all around the city.

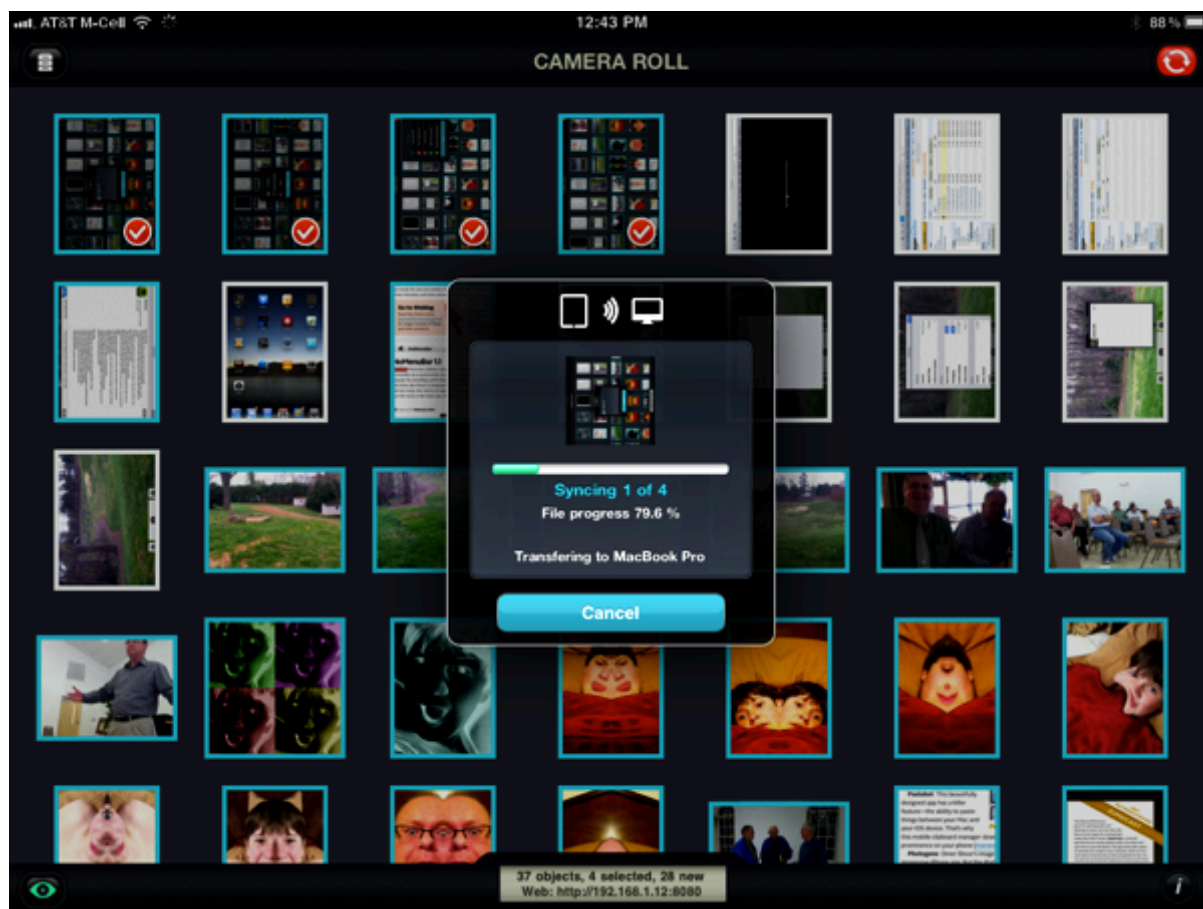
How did you balance the locked down needs of schools with the needs of the Apps?

3G connection was not an option because we needed to keep everyone inside the school firewall. So we're satisfying a lot of the schools' online safety needs because we're staying inside their firewall.

Use of e-mail to send and receive media is also not something we can encourage because that is currently not allowed for students. To get around this, we found two brilliant apps that let iPad send and receive data with any computer wirelessly- [Photosync](http://itunes.apple.com/us/app/photosync-wirelessly-transfers/id415850124?mt=8) and [MP3 player](http://itunes.apple.com/us/app/mp3-player-no-itunes-sync/id455473316?mt=8). This avoids the annoying issue of having to designate a computer and active iTunes account for a given iPad to sync up with. All the teacher wants to do is get their video or photo out of the iPad and onto a computer so they can work on it later or post it online. These apps allow them to do that in the simplest way possible.

What extra features did you wish the iPad/iOS had to help with these sorts of rollouts?

The iPad is designed for an individual to use and sync up with their personal computer. It would be nice if there was a "group mode" or something for iOS that made it easier to deploy multiple iPads to a user group who don't have syncing computers. In our dream setup, Arts Achieve central would have a Master iPad, and any changes we made to the master unit would



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/02/photosync2.png>

Transferring photos easily and wirelessly with Photosync App

automatically push out to the classroom iPads, without the teachers having to log in to iTunes, memorize any passwords, punch in credit card info, or any other time-killing, lesson-derailing obstacles. “Group mode” would be good for schools, or for a company issuing iPads out to employees, or a parent who wants to manage their kids’ devices. iCloud is close, in that it eliminates some of the headache of plugging in and physically syncing, but again, that service is designed for an individual consumer managing a personal media library... it wouldn’t work that well for a project like Arts Achieve, which demands replicability & uniformity from one classroom to the next.

This entry was posted in Education <http://labs.cooperhewitt.org/category/education/>, *Tablets* <http://labs.cooperhewitt.org/category/tablets/> and tagged *Apps* <http://labs.cooperhewitt.org/tag/apps/>, *i3* <http://labs.cooperhewitt.org/tag/i3/>, *iPad* <http://labs.cooperhewitt.org/tag/ipad/>, *mtogo* <http://labs.cooperhewitt.org/tag/mtogo/> on February 17, 2012

[<http://labs.cooperhewitt.org/2012/deploying-ipads-nyc-schools/>] by *katieshelly* <http://labs.cooperhewitt.org/author/katieshelly/>.

Releasing the collection on GitHub

Late last week we released the Cooper-Hewitt's collection metadata as a [downloadable file](http://www.cooperhewitt.org/data) <http://www.cooperhewitt.org/data>. And in a first for the Smithsonian, we dedicated the release to the public domain, using [Creative Commons Zero](http://creativecommons.org/about/cc0) <http://creativecommons.org/about/cc0>.

I'm often asked why releasing collection metadata is important. My teams [did similar things at the Powerhouse Museum](http://www.freshandnew.org/2009/11/downloading-mashing-and-remixing-our-collection-metadata/) <http://www.freshandnew.org/2009/11/downloading-mashing-and-remixing-our-collection-metadata/> when I was there, and I still believe that this is the direction that museums and other collecting institutions need to go. With the growing Digital Humanities field, there is increasing value in scholars being able to 'see' a collection at a macro, zoomed out level – something which just isn't possible with search interfaces. Likewise the release of such data under liberal licenses or to the public domain brings closer a future in which cross-institutional discovery is the norm.

Philosophically, too, the public release of collection metadata asserts, clearly, that such metadata is the raw material on which interpretation through exhibitions, catalogues, public programmes, and experiences are built. On its own, unrefined, it is of minimal 'value' except as a tool for discovery. It also helps remind us that *collection metadata is not the collection itself*.

Of course it is more complex than that.

There are plenty of reasons why museums are hesitant to release their metadata.

Collection metadata is often in a low quality state. Sometimes it is purposely unrefined, especially in art museums where historical circumstance and scholarly norms have meant that so called 'tombstone data' has sometimes been kept to a bare minimum so as to not 'bring opinion' to objects. Other times it has simply been kept at a minimum because of a lack of staff resources. Often, too, internal workflows still keep exhibition label and catalogue publishing separate from collection documentation meaning that obvious improvements such as the rendering of 'label copy' and catalogue narrative to object records is not automatic.

But I digress.

We released our metadata through GitHub, and that needs some additional explanation.

GitHub <https://github.com/> is a source repository of the kind traditionally used by coders. And, lacking a robust public endpoint of our own which could track changes and produce diff files as we uploaded new versions of the collection data, GitHub was the ideal candidate. Not only that, the type of ‘earlyvangelists’ we are targetting with the data release, hang out there in quantity.

The idea for using GitHub to host collection datasets had actually been bouncing around since April 2009. **Aaron Straup-Cope** <http://www.aaronland.info/> and I were hanging out in-between sessions at **Museums and the Web in Indianapolis** <http://www.museumsandtheweb.com/mw2009/> talking about Solr, collection data, and APIs. Aaron suggested that GitHub would be the perfect place for museums to dump their collections – as giant text blobs – and certainly better than putting it on their own sites. Then 2010 happened and the early-mover museums all suddenly had built APIs for their collections. Making a text dump was suddenly off the agenda, but that idea of using GitHub still played on my mind.

Now, Cooper-Hewitt is not yet in a suitable position infrastructurally to develop an API for its collection. So when the time came to make release the dataset, that conversation from 2009 suddenly became a reality.

And, fittingly, Aaron has been the first to **fork the collection** <https://github.com/straup/collection> – creating individual JSON for each object record.

Could GitHub become not just a source code repository but a repository for ‘cultural source code’?

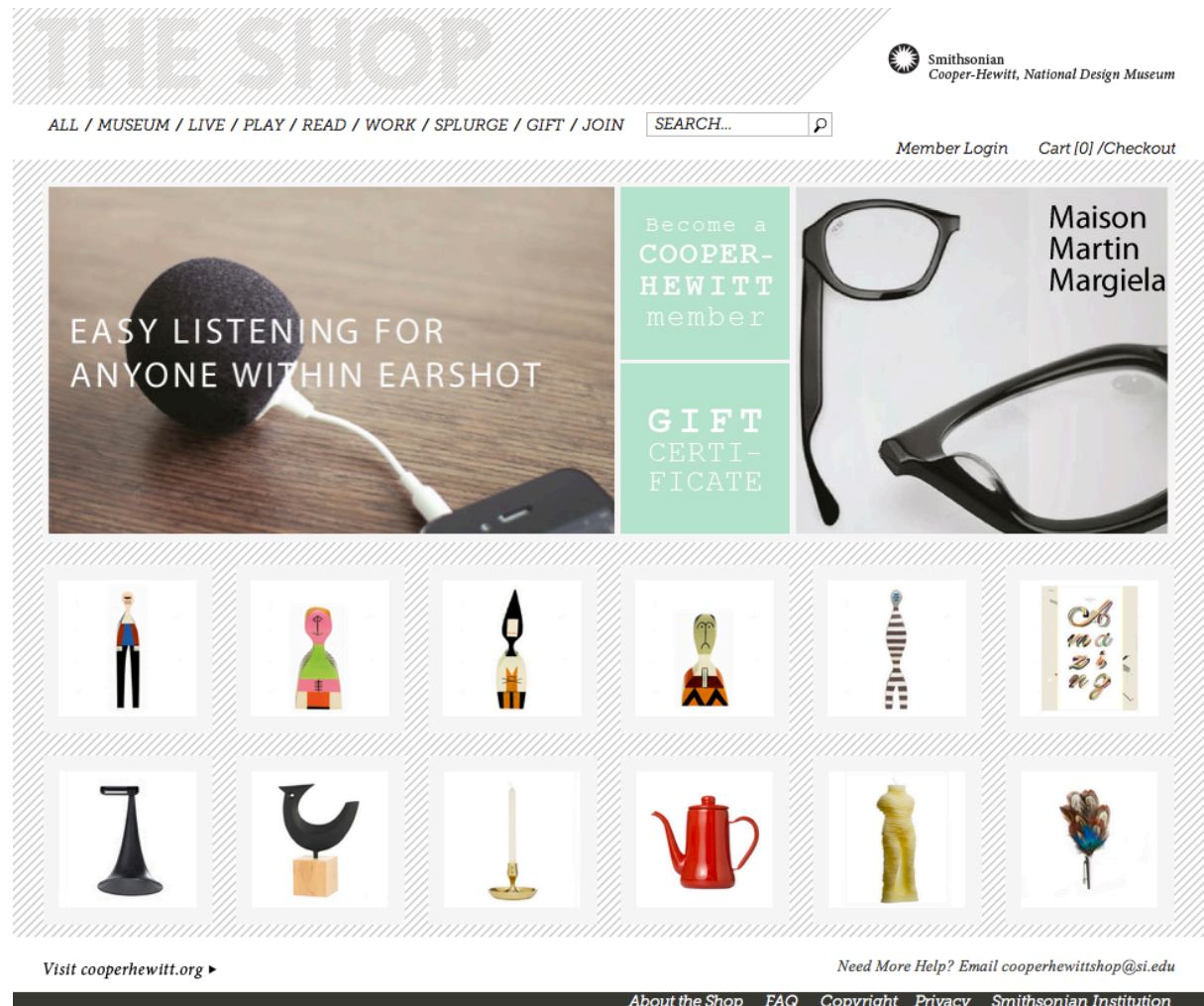


<https://github.com/cooperhewitt/collection>

(But read the data info first <http://www.cooperhewitt.org/collections/data> !)

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/>, *Collection data* <http://labs.cooperhewitt.org/category/collection-data/> and tagged *creative commons* <http://labs.cooperhewitt.org/tag/creative-commons/>, *github* <http://labs.cooperhewitt.org/tag/github/>, *open data* <http://labs.cooperhewitt.org/tag/open-data/> on February 25, 2012 [<http://labs.cooperhewitt.org/2012/releasing-collection-github/>] by *Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

Rebooting retail – redesigning the Shop at Cooper-Hewitt



Jocelyn Crapo is the Cooper-Hewitt's Director of Retail Operations. She and her team have been working to transfer the focus of the museum shop from its former physical presence in the galleries to an online experience whilst the redevelopment takes place.

To that end, a brand new ecommerce presence went live as [public beta](http://shop.cooperhewitt.org) <http://shop.cooperhewitt.org> last week.

Here's Jocelyn.

Tell us about the history of Cooper-Hewitt's online shop.

The Shop's first ecommerce site launched in June of 2006, using a custom content management system on the back end and was a close visual representation of the physical shop space. The first iteration used Paypal as the payment processor and the shop staff maintained inventory levels for both the physical shop and the Ecommerce site by running online sales through the Point of Sale in the Shop.

At the time we were using and constantly maintaining three different content management systems within the Retail team and as many accounting platforms within one department.

1. CAM Commerce's Retail Star Point-of-Sale system to maintain inventory levels and Accounting reports,
2. Filemaker to maintain "blurb" information for display in the physical shop space and to maintain online blurb information
3. Custom CMS to maintain the Ecommerce website
4. Paypal to process Ecommerce sales

It was very inefficient and downright clunky. Not to mention a high risk of human error.

If there was a price change on one product, the price had to be changed in four different places, often requiring action from at least three different people. The price had to be updated in Retail Star, a new tag printed and affixed to the product, the price had to be updated in Filemaker and a new blurb had to be printed and displayed within the shop, and finally the Ecommerce CMS had to be updated for the web. All this for a small change of price in one product!

We began looking for a new inventory management system that could handle more of our needs. We wanted a system where the product attributes (price, blurb, inventory) could all be managed by one person in one place as much as possible. We finally identified a system and launched with the new system in October, 2010.

How did the old site perform?

During the first 5 years, our online sales ranged from 5-8% of our gross sales – which may not seem very significant, but given the small investment cost that went into the site in 2006, it paid for itself many times over.

As we were able to gather better and better data from Google Analytics we found that we had a conversion problem. We were getting visitors to the site, but in the end only 0.39% of the total visitors who came to the online shop actually purchased something.

Worse, only 10.81% of the visitors who put something in their cart actually completed the transaction.

While we were frustrated with the back-end functionality we knew that we had to streamline our front-end usability issues and bring up the conversion rates.

As we approached the beginning of a major renovation at the Cooper-Hewitt campus at the end of 2011, it was crucial to move forward as quickly as possible to get the new website on its feet. It quickly became the sole revenue source for the retail business venture and we needed a way to put more products online – quickly and easily. Moving from having both a physical shop and an online shop to having just an online shop has posed some new challenges.

We've had to re-evaluate order quantities and think differently about our space constraints. We don't have the luxury of having two different selling platforms. We no longer have the face-to-face contact on the sales floor that inherently sparks a connection and relationship between the retailer and visitor. We are also challenged to interact visually and via narrative, rather than a tactile, person-to-person selling experience.

What were the features you looked for in a new site?

We needed a new system that offered;

- Real time inventory management for multiple sales channels: POS in physical shop space, Ecommerce site, potential pop-up shops, etc.

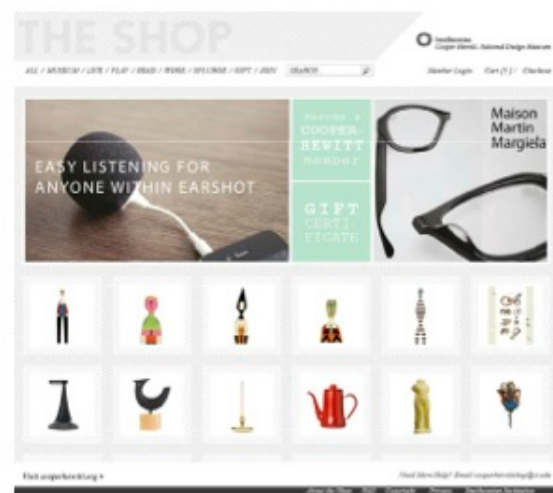
One immediate problem we experienced was maintaining inventory levels, especially when we had a product that was picked up for editorial coverage and we had a hard time keeping product in the shop, while fulfilling the website orders. It became obvious very quickly that we needed a much more robust system that could maintain real-time inventory, selling products through the physical shop, through an off-site kiosk or pop-up shop, and on the web with one central inventory.

- Seamless payment.

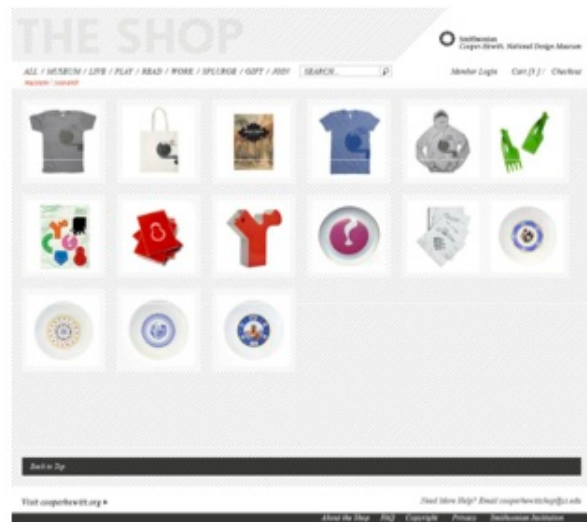
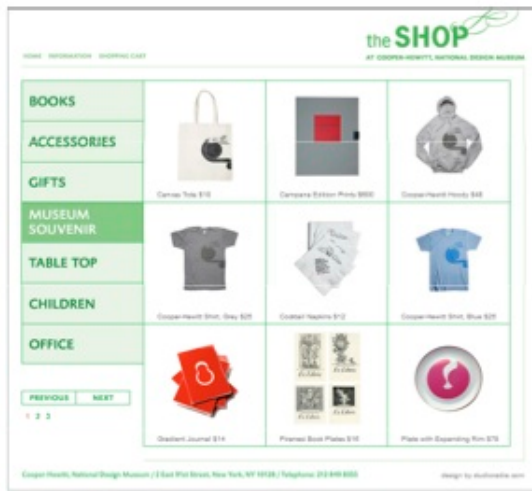
The old site used Paypal as the payment gateway and we knew from Google Analytics that many visitors to our site who had placed items in their shopping cart were not completing their purchases. By doing some tracking we discovered that nearly 9 out of every 10 were abandoning the purchase when they left us to checkout through Paypal.

- Modern, flexible navigation and search, not to mention SEO.
- Integrated members discounting
- Flexible product pages that would allow us to tell the stories of different products and why we had selected them for our shop.
- Real time Fedex pricing

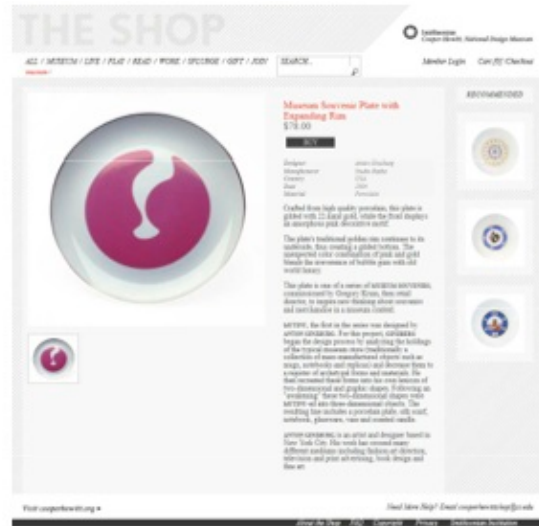
Let's look at some before and after screens



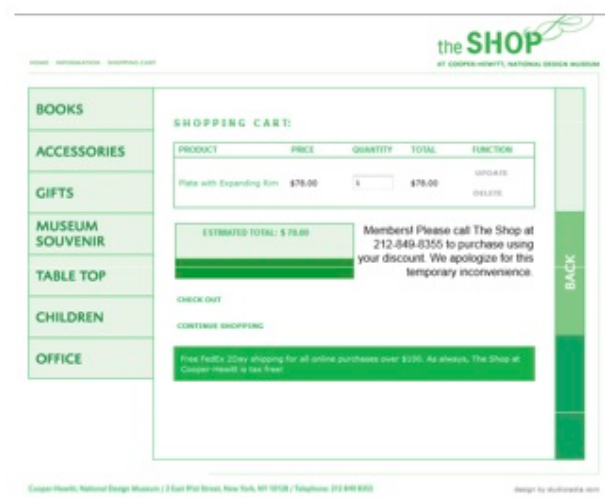
Home page before and after. The new site is less cryptic and allows us to show many more products immediately.



Product category view before and after



Product detail before and after. The new site gives the ability to have more detailed information on the products, large pop up views, as well as recommendations in the sidebar.



Checkout before and after. A much more streamlined checkout process without having to go offsite to PayPal.

How do you think the online shop will affect the future retail presence of Cooper-Hewitt?

Looking forward, I imagine we will have a very different perspective as we plan to open the next iteration of The Shop at Cooper-Hewitt when the museum re-opens.

What were once major factors in product selection will likely become less important, for example, our audience won't necessarily be limited to people who can physically come to the Upper East Side, and we'll undoubtedly have an off-site storage facility that will allow us to offer larger footprint products like furniture, lighting, textiles, even wallpapers.

We will also be able to use web analytics to inform merchandising strategies as we re-open a brick and mortar shop down the line, for instance, we can start to drill down into the purchasing habits of our customers, i.e. people who bought "x" also bought "y". Armed with this knowledge we might merchandise two products together, that we wouldn't have ever dreamed of displaying together before.

In fact, we will have the tools to do some online experiments which will provide quick and measurable results about what products sell best when merchandised together. These types of statistics were impossible to gather within our physical space since we had no way to track real time results of merchandising changes.

It will be very interesting, now that we have this new ecommerce system in place, whether the new identity of the physical shop will respond to the website or if the website will morph to a brand new graphic expression in response to the design of the new Shop to open with the new museum buildings.

When does the new site launch?

It is in public beta right now! And we're doing a formal launch in May after we make some incremental improvements to it over the next two months.

[Check it out](http://shop.cooperhewitt.org) <http://shop.cooperhewitt.org> !

This entry was posted in [Backends](http://labs.cooperhewitt.org/category/backends/) *and tagged* [ecommerce](http://labs.cooperhewitt.org/tag/ecommerce/) [merchandising](http://labs.cooperhewitt.org/tag/merchandising/) [seo](http://labs.cooperhewitt.org/tag/seo/) [UX](http://labs.cooperhewitt.org/tag/ux/) *on March 21, 2012* [<http://labs.cooperhewitt.org/2012/rebooting-retail-redesigning-shop-cooper-hewitt/>] *by* [crapoj](http://labs.cooperhewitt.org/author/crapoj/) .

Teens & Tech Focus Group

On Saturday, at Cooper-Hewitt, we had a focus group with about 20 teenagers to learn how they prefer to capture and create media. The focus group was held jointly by Cooper-Hewitt and the [American Museum of Natural History](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CEAQFjAA&url=http%3A%2F%2Fwww.amnh.org%2F&ei=uYVwT6XzJqq80QHovZT8Bg&usq=AFQjCNHjCgI5Kf-sWQuLxLaWczAPaf5T6sg&sig2=-F6DaQWsyfRTMJsfyfP2Hg)

. Our two museums are connected by [MacArthur's HIVE Learning Network](http://www.hivelearningnetwork.org/), which aims to create and connect informal and formal learning opportunities for youth in virtual and physical spaces.



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/photo-4.jpg>

My group used exclusively iPads– even when other devices were readily available.

Both museums had experienced some digital follies over the last few years in our efforts to in-

corporate new digital tools into youth programs. From 3G connectivity woes to buggy beta software, these issues are an educator's nightmare. Any one who has some experience teaching or running programs for kids can tell you that there's no time for glitches when you've got a room full of students and a short amount of time. Stuff has to work, and you want the focus to be on content, not on tools.

Before diving in to a new season of [fashion workshops](http://www.youtube.com/playlist?list=PL5275BB9CE-F4F5339&feature=plcp) and [biology labs](http://www.amnh.org/education/students/) with hundreds of NYC teens, both museums wanted some fresh insight on how today's teens relate to tech.

We wanted the students to get educational value out of their day with us, so we designed the focus group as a typical [DesignPrep](http://www.cooperhewitt.org/education/designprep) program, but with some added surveys and discussions about technology. Here was the structure of the day:

1. [Pre-Survey](http://surveymonkey.com/s/designchallenge) for students
2. Cooper-Hewitt educators' *excellent* "What is Design" and "Learning to See" presentations.
3. [Ready, Set, Design](http://www.cooperhewitt.org/blog/2011/09/06/ready-set-design) – a hands-on activity to get the group "thinking like designers." The activity challenges were tailored to the context of Central Park ("I need to find my way around the park efficiently," "I want my walk around the reservoir to be more fun and interesting," etc)
4. Announced the students' challenge– to collect a diverse array data from a given zone in Central Park, identify something in that zone that could benefit from a design solution, and finally present their ideas to the group.
5. "Hardware Buffet"– we put out Android phones, iPads, still cameras, video cameras, notebooks and pens. We observed carefully while the students chose their tools.
6. We split into 4 groups and headed to the park. The students lead their own processes of data collection while Museum staff observed. Staff also carried bags of "buffet leftovers" to allow any hardware swaps along the way.
7. We returned to Cooper-Hewitt, where the students synthesized their media and created presentations.



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/photo-5.jpg>

Collecting photos, videos and statistics in Central Park

8. Presentations, group discussion about technology, followed by [an exit survey](http://uxn.wufoo.com/forms/student-exit-survey/) <http://uxn.wufoo.com/forms/student-exit-survey/> for students.

9. After the students left, Museum staff completed [a survey](http://uxn.wufoo.com/forms/grownups-exit-survey/) <http://uxn.wufoo.com/forms/grownups-exit-survey/> to record fresh thoughts on the day.

What did we learn? Here are some excerpts from Museum staff's surveys:

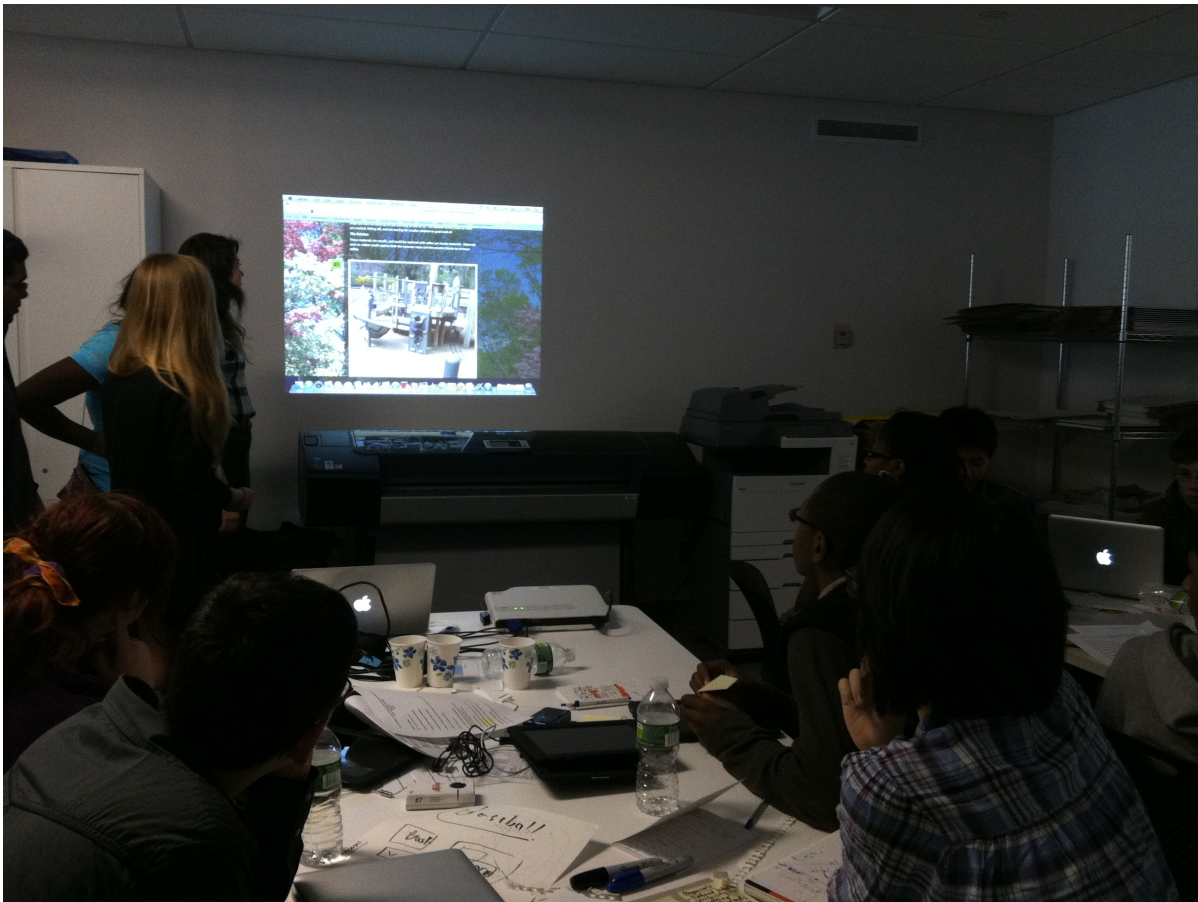
<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/Steve-Gano-Survey.png>

<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/katie-shelly-survey.png>



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/photo-3.jpg>

Synthesizing multimedia and ideas for a final presentation



Student presentation using Tumblr

What did the students gravitate toward today? What was unfamiliar for them?

Being outside. Working together, enjoying themselves, focusing on the task and doing a good job. No one seemed distracted by the technology, either by its novelty or the difficulties in using them.

Anything else to add?

I'm of mixed mind about how to support this work. On the one hand, in a longer work period, the how-tos could be useful. In this compressed exercise, they had to be more nimble, find the easier ways to move forward (that's always true, but more so when you have only minutes). They are quite facile at figuring things out, keeping things moving forward, and I think that's the digital literacy we hope to see and support. But can we help them go deeper, be more creative, be more thorough and evidence-based in their work?

Describe your students' behavior in the park. What did you notice about their interactions with digital tools?

my group was ONLY interested in iPads. I did NOT guide them in that direction, in fact i tried to stay as neutral as possible, and reminded them that they could change their device at any time. i held all the hardware options for them in a tote bag. they took notes on iPads and used it for pictures and video.

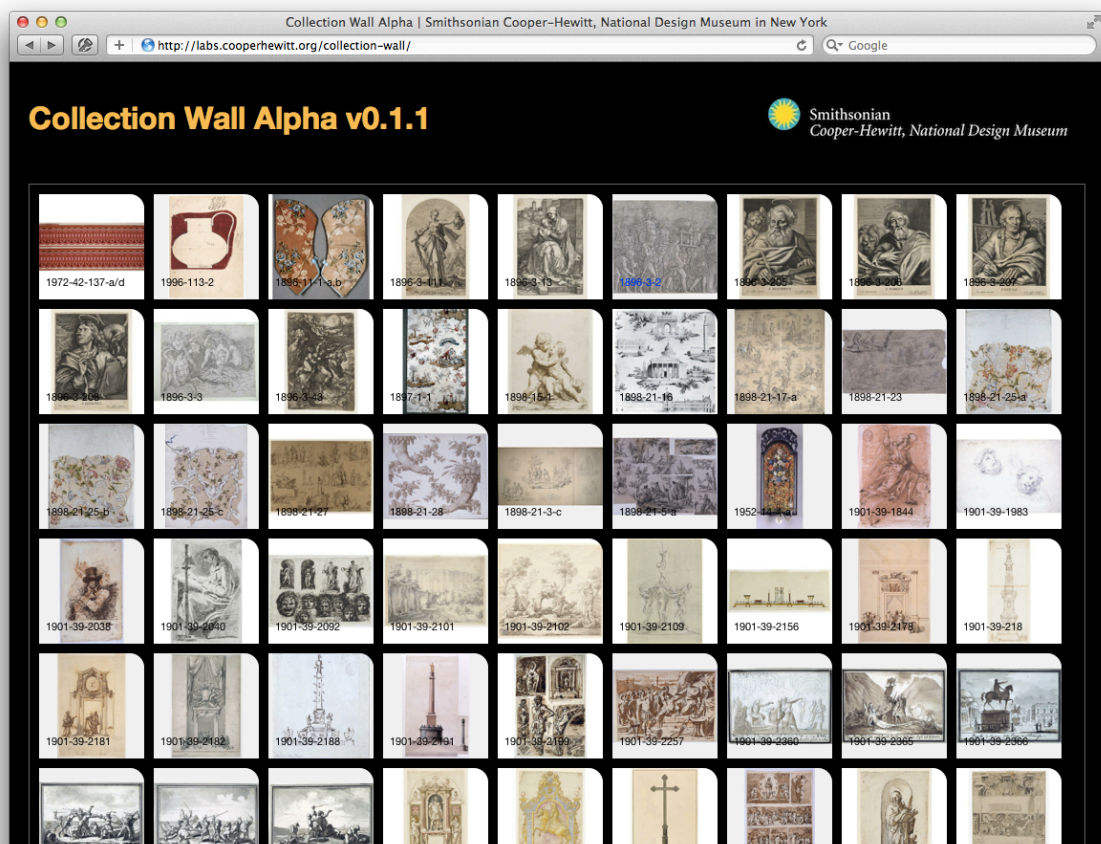
What did the students gravitate toward today? What was unfamiliar for them?

Many Gravitated towards: iPads, Tumblr, Vimeo, Gmail, digital cameras, google docs
Some Gravitated towards: google sketchup, powerpoint, iMovie, FlipShare was easy/familiar for some of them..
Unfamiliar: Ushahidi, Do Forms, they were unfamiliar with the possibilities of the Android and didn't think of it as something that could "do everything"--which was their attitude toward the iPad

This entry was posted in Education <http://labs.cooperhewitt.org/category/education/> *and tagged digital youth* <http://labs.cooperhewitt.org/tag/digital-youth/>, *evaluation* <http://labs.cooperhewitt.org/tag/evaluation/>, *mobile* <http://labs.cooperhewitt.org/tag/mobile/>, *teenagers* <http://labs.cooperhewitt.org/tag/teenagers/>, *UX* <http://labs.cooperhewitt.org/tag/ux/> *on March 26, 2012* [<http://labs.cooperhewitt.org/2012/teens-tech/>] *by katieshelly* <http://labs.cooperhewitt.org/author/katieshelly/>.

Building the wall

Last month we released our collection data on [Github.com](http://github.com/cooperhewitt/collection) <http://github.com/cooperhewitt/collection>. It was a pretty monumental occasion for the museum and we all worked very hard to make it happen. In an attempt to build a small example of what one might do with all of this data, we decided to build a new visualization of our collection in the form of the “[Collection Wall Alpha](http://collection-wall.herokuapp.com)” <http://collection-wall.herokuapp.com>.



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/Screen-Shot-2012-03-27-at-11.22.49-AM.png>

The collection wall, Alpha

The idea behind the collection wall was simple enough—create a visual display of the objects in our collection that is fun and interactive. I thought about how we might accomplish this, what it would look like, and how much work it would be to get it done in a short amount of time. I

thought about using our own .csv data, I tinkered, and played, and extracted, and extracted, and played some more. I realized quickly that the very data we were about to release required some thought to make it useful in practice. I probably over-thought.



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/Screen-Shot-2012-03-27-at-11.22.39-AM.png>

Isotope

After a short time, we found this lovely JQuery plugin called [Isotope](http://isotope.metafizzy.co/) <http://isotope.metafizzy.co/>. Designed by David DeSandro, Isotope offers “an exquisite JQuery plugin of magical layouts.” And it does! I quickly realized we should just use this plugin to display a never-ending waterfall of collection objects, each with a thumbnail, and linked back to the records in our online collection database. Sounds easy enough, right?

Getting Isotope to work was pretty straight-forward. You simply create each item you want on the page, and add class identifiers to control how things are sorted and displayed. It has many options, and I picked the ones I thought would make the wall work.

Next I needed a way to reference the data, and I needed to produce the right subset of the data—the objects that actually have images! For this I decided to turn to Amazon's [SimpleDB](http://aws.amazon.com/simpledb). SimpleDB is pretty much exactly what it sounds like. It's a super-simple to implement, scalable, non-relational database which requires no setup, configuration, or maintenance. I figured it would be the ideal place to store the data for this little project.

Once I had the data I was after, I used a tool called [RazorSQL](http://www.razorsql.com) to upload the records to our SimpleDB domain. I then downloaded the AWS PHP SDK and used a few basic commands to query the data and populate the collection wall with images and data. Initially things were looking good, but I ran into a few problems. First, the data I was querying was over 16K rows tall. That's a lot of data to store in memory. Fortunately, SimpleDB is already designed with this issue in mind. By default, a call to SimpleDB only returns the first 100 rows (you can override this up to 2500 rows). The last element in the returned data is a special token key which you can then use to call the next 100 rows.

Using this in a loop one could easily see how to grab all 16K rows, but that sort of defeats the purpose as it still fills up the memory with the full 16K records. My next thought was to use paging, and essentially grab 100 rows at a time, per page. Isotope offers a pretty nifty "Infinite Scroll" configuration. I thought this would be ideal, allowing viewers to scroll through all 16K images. Once I got the infinite scroll feature to work, I realized that it is an issue once you page down 30 or 40 pages. So, I'm going to have to figure out a way to dump out the buffer, or something along those lines in a future release.

After about a month online, I noticed that SimpleDB charges were starting to add up. I haven't really been able to figure out why. According to the docs, AWS only charges for "compute hours" which in my thinking should be much less than what I am seeing here. I'll have to do some more digging on this one so we don't break the bank!

Amazon SimpleDB

[Download Usage Report »](#)

US East (Northern Virginia) Region

| | | |
|---|-------------|--------|
| \$0.00 per Compute-Hour consumed first 25 hours per month | 25 Hrs | 0.00 |
| \$0.14 per Compute-Hour consumed beyond first 25 free hours per month | 755.435 Hrs | 105.76 |
| \$0.00 per GB-Month of storage for first 1 GB-Month | 0.004 GB-Mo | 0.00 |

\$105.76

<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/03/Screen-Shot-2012-03-27-at-1.37.25-PM.png>

SimpleDB charges

Another issue I noticed was that we were going to be calling lots of thumbnail images directly from our collection servers. This didn't seem like such a great idea, so I decided to upload them all to an Amazon S3 bucket. To make sure I got the correct images, I created simple php script that went through the 16K referenced images and automatically downloaded the correct resolution. It also auto-renamed each file to correspond with the record ID. Lastly, I set up an [Amazon CloudFront CDN](http://aws.amazon.com/cloudfront) http://aws.amazon.com/cloudfront for the bucket, in hopes that this would speed up access to the images for users far and wide.

Overall I think this demonstrates just one possible outcome of our releasing of the collection meta-data. I have plans to add more features such as sorting and filtering in the near future, but it's a start!

Check out the code after the jump (a little rough, I know).

```
1 <?php
2
3 // Include the SDK
4 require_once 'awssdk/sdk.class.php';
5 $sdb = new AmazonSDB();
6 $domain = 'collection-wall-beta';
7 $next_token = null;
8
9 $page = 0;
10
11 $page = $_GET['page'];
12
13
14 for($i=0; $i <= $page; $i++) {
15     if ($next_token)
16     {
17         $results = $sdb->select("SELECT * FROM `{$domain}`" , array(
18             'NextToken' => $next_token,
19         ));
20     }
21     else
22     {
23         $results = $sdb->select("SELECT * FROM `{$domain}`");
24     }
25
26 }
```

```

27 $next_token = isset($results->body->SelectResult->NextToken)
28             ? (string) $results->body->SelectResult->NextToken
29             : null;
30 }
31
32 $items = $results->body->Item();
33
34 $data = reorganize_data($items);
35
36 $html = generate_html_table($data);
37
38
39 function reorganize_data($items)
40 {
41     // Collect rows and columns
42     $rows = array();
43     $columns = array();
44
45     // Loop through each of the items
46     foreach ($items as $item)
47     {
48         // Let's append to a new row
49         $row = array();
50         $row['id'] = (string) $item->Name;
51
52         // Loop through the item's attributes
53         foreach ($item->Attribute as $attribute)
54         {
55             // Store the column name
56             $column_name = (string) $attribute->Name;
57
58             // If it doesn't exist yet, create it.
59             if (!isset($row[$column_name]))
60             {
61                 $row[$column_name] = array();
62             }
63
64             // Append the new value to any existing values
65             // (Remember: Entries can have multiple values)
66             $row[$column_name][] = (string) $attribute->Value;
67             natcasesort($row[$column_name]);
68
69             // If we've not yet collected this column name, add it.
70             if (!in_array($column_name, $columns, true))
71             {
72                 $columns[] = $column_name;

```

```

73         }
74     }
75
76     // Append the row we created to the list of rows
77     $rows[] = $row;
78 }
79
80 // Return both
81 return array(
82     'columns' => $columns,
83     'rows' => $rows,
84 );
85 }
86
87 function generate_html_table($data)
88 {
89     // Retrieve row/column data
90     $columns = $data['columns'];
91     $rows = $data['rows'];
92
93     $output = '';
94
95     // Loop through the rows
96     foreach ($rows as $row)
97     {
98         $output .= '<div class="element">' . PHP_EOL;
99         $output .= '<a href="http://collection.cooperhe
101         $output .= '</div>' . PHP_EOL;
102         $output .= PHP_EOL;
103     }
104
105     return $output;
106 }
107
108
109 ?>
110
111
112
113 <!doctype html>
114 <html lang="en">
115 <head>
116
117     <meta charset="utf-8" />
118     <title>Collection Wall Alpha | Smithsonian Cooper-Hewitt, National Design Museum

```

```

119
120 <!--[if lt IE 9]><script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></script></!-->
121
122 <link rel="stylesheet" href="css/style.css" />
123
124 <!-- scripts at bottom of page -->
125
126
127 </head>
128 <body id="top" class="homepage ">
129
130
131 <section id="content">
132 
133 <h1 style="padding-bottom:20px;padding-top:20px;"><a href="/">Collection Wall </a>
134
135
136
137
138 <div id="container" class="clearfix clickable infinite-scrolling">
139
140 <?php echo $html; ?>
141 <p id="back-top">
142 <a href="#top"><span></span>Back to Top</a>
143 </p>
144
145 </div>
146
147
148 <nav id="page_nav">
149 <a href="?page=<?php echo $page+1 ?>">Next Page</a>
150 </nav>
151
152 <script src="js/jquery-1.7.1.min.js"></script>
153 <script src="jquery.isotope.min.js"></script>
154 <script src="js/nextPage.js"></script>
155 <script src="js/jquery.infinitemin.js"></script>
156
157 <script>
158
159 $(function(){
160
161 var $container = $('#container');
162
163 $('#append a').click(function(){
164 var $newEls = $( fakeElement.getGroup() );

```

```

165     $container.append( $newEls ).isotope( 'appended', $newEls );
166
167     return false;
168 });
169
170 $container.isotope({
171     masonry: {
172         columnWidth: 120
173     },
174     sortBy: 'number',
175     getSortData: {
176         number: function( $elem ) {
177             var number = $elem.hasClass('element') ?
178                 $elem.find('.number').text() :
179                 $elem.attr('data-number');
180             return parseInt( number, 10 );
181         },
182         alphabetical: function( $elem ) {
183             var name = $elem.find('.name'),
184                 itemText = name.length ? name : $elem;
185             return itemText.text();
186         }
187     }
188 });
189
190 var $optionSets = $('#options .option-set'),
191     $optionLinks = $optionSets.find('a');
192
193 $optionLinks.click(function(){
194     var $this = $(this);
195     // don't proceed if already selected
196     if ( $this.hasClass('selected') ) {
197         return false;
198     }
199     var $optionSet = $this.parents('.option-set');
200     $optionSet.find('.selected').removeClass('selected');
201     $this.addClass('selected');
202
203     // make option object dynamically, i.e. { filter: 'my-filter-class' }
204     var options = {},
205         key = $optionSet.attr('data-option-key'),
206         value = $this.attr('data-option-value');
207     // parse 'false' as false boolean
208     value = value === 'false' ? false : value;
209     options[ key ] = value;
210     if ( key === 'layoutMode' && typeof changeLayoutMode === 'function' ) {

```



```

211         // changes in layout modes need extra logic
212         changeLayoutMode( $this, options )
213     } else {
214         // otherwise, apply new options
215         $container.isotope( options );
216     }
217
218     return false;
219 });
220
221     // change size of clicked element
222     $container.delegate( '.element', 'click', function(){
223         $(this).toggleClass('large');
224         $container.isotope('reLayout');
225     });
226
227     // toggle variable sizes of all elements
228     $( '#toggle-sizes' ).find('a').click(function(){
229         $container
230             .toggleClass('variable-sizes')
231             .isotope('reLayout');
232         return false;
233     });
234
235
236     $container.infiniteScroll({
237         navSelector : '#page_nav',    // selector for the paged navigation
238         nextSelector : '#page_nav a', // selector for the NEXT link (to page 2)
239         itemSelector : '.element',    // selector for all items you'll load
240         loading: {
241             finishedMsg: 'No more pages to load.',
242             img: 'http://i.imgur.com/qkKy8.gif'
243         },
244     },
245     // call Isotope as a callback
246     function( newElements ) {
247         $container.isotope( 'appended', $( newElements ) );
248     }
249 );
250
251
252 });
253
254 </script>
255
256 <script>

```

```

257 $(document).ready(function(){
258
259     // hide #back-top first
260     $("#back-top").hide();
261
262     // fade in #back-top
263     $(function () {
264         $(window).scroll(function () {
265             if ($(this).scrollTop() > 100) {
266                 $('#back-top').fadeIn();
267             } else {
268                 $('#back-top').fadeOut();
269             }
270         });
271
272         // scroll body to 0px on click
273         $('#back-top a').click(function () {
274             $('body,html').animate({
275                 scrollTop: 0
276             }, 800);
277             return false;
278         });
279     });
280
281 });
282 </script>
283
284
285 <footer>
286 Powered by <a href="http://isotope.metafizzy.co/">Isotope</a> and several hundred
287 </footer>
288
289 </section> <!-- #content -->
290
291 <script type="text/javascript">
292
293     var _gaq = _gaq || [];
294     _gaq.push(['_setAccount', 'UA-21347959-1']);
295     _gaq.push(['_setDomainName', 'cooperhewitt.org']);
296     _gaq.push(['_trackPageview']);
297     _gaq.push(['_trackPageLoadTime']);
298     _gaq.push(['_setCampaignCookieTimeout', 17280000]);
299
300     (function() {
301         var ga = document.createElement('script'); ga.type = 'text/javascript'; ga.as
302         ga.src = ('https:' == document.location.protocol ? 'https://ssl' : 'http://w

```

```

303     var s = document.getElementsByTagName('script')[0]; s.parentNode.insertBefore
304     }));
305
306 </script>
307
308 <script type="text/javascript">
309     if(typeof jQuery != 'function'){
310     var script = '<script type="text/javascript" src="http://ajax.go
311     document.write(script);
312     }
313
314 </script>
315
316
317 <script type="text/javascript">
318
319     $(document).ready(function(){
320
321         $('a').mouseup(function(){
322             href = $(this).attr('href');
323             href_lower = href.toLowerCase();
324             if(href_lower.substr(-3) == "pdf" || href_lower.substr(-3)
325             href_lower.substr(-3) == "mp3" || href_lower.substr(-3)
326             href_lower.substr(-3) == "txt" || href_lower.substr(-3)
327                 _gaq.push(['_trackEvent', 'Downloads', href_lower
328             }
329             if(href_lower.substr(0, 4) == "http") {
330                 var domain = document.domain.replace("www.", '');
331                 if(href_lower.indexOf(domain) == -1){
332                     href = href.replace("http://", '');
333                     href = href.replace("https://", '');
334                     _gaq.push(['_trackEvent', 'Outbound Traf
335                 }
336             }
337         });
338     });
339 </script>
340 </body>
341 </html>

```

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged* *aws* <http://labs.cooperhewitt.org/tag/aws/>, *cloudfront* <http://labs.cooperhewitt.org/tag/cloudfront/>, *code* <http://labs.cooperhewitt.org/tag/code/>, *collections* <http://labs.cooperhewitt.org/tag/collections/>, *data* <http://labs.cooperhewitt.org/tag/data/>, *s3* <http://labs.cooperhewitt.org/tag/s3/>, *simplifiedb* <http://labs.cooperhewitt.org/tag/simplifiedb/> *on March 29, 2012* [<http://labs.cooperhewitt.org/2012/building-the-wall/>] *by micah* <http://labs.cooperhewitt.org/author/micah/>.

Thoughts on Skillshare's Penny Conference



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/04/skillshare-image.png>

Last week I went to Skillshare's [Penny Conference](http://www.skillshare.com/penny) about re-imagining education for the 21st century. Here are my reactions to some of the ideas that caught my interest:

[Michael Karnjanaprakorn](http://www.skillshare.com/about/team), founding CEO of [Skillshare](http://www.skillshare.com/), opened the day with a talk that drew a distinction between learning and education. His company is built on the idea that in the information age, people don't value a highly-trained expert lecturing at the front of a room as much as they used to. Education today is decentralizing and democratizing. His triumphant tone here reminded me of [Robert Wong at Bill's Design Talks](http://www.youtube.com/watch?v=6vIPk6vIwv0). Robert was really excited about the widening availability of digital design and media tools and their democratizing effect on culture.

A sense of triumph was also in the air when various speakers brought up themes of intellectual rebelliousness and dropping out of college. Rote learning, formulaic testing, and traditional

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Kareem Amin

Co-founder @ Frame and TheSharedWeb

209 people have taken this class before

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23

http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/04/skillshare_screenshot.png

Skillshare is an organization whose mission is to transform education by empowering teaching and democratizing learning.

metrics of success were denounced as the enemies of innovators and dreamers everywhere. These ideas uphold a lot of 20th century [American lore](https://www.google.com/search?ix=aca&sourceid=chrome&ie=UTF-8&q=dropout+billionaires&safe=active) <https://www.google.com/search?ix=aca&sourceid=chrome&ie=UTF-8&q=dropout+billionaires&safe=active> Surrounding the lives of entrepreneurial and creative luminaries. Our culture loves the stories surrounding famous dropouts like Steve Jobs and Mark Zuckerberg. I find these legends to have a strong Modernist aroma, distinctly un-21st century– the romance of a great lone genius. My hope for education in the 21st century is that our culture will put very high value on humility & interdisciplinary teamwork as weapons against big complex problems. A good team, I think, would have a healthy blend of rule-following experts and rebellious thinkers. Actually, I think both traits can coexist in one person. It

shouldn't matter whether you're a dropout or a PhD– what matters is what you bring to the table.

[Baratunde Thurston](http://www.baratunde.com/) <http://www.baratunde.com/> spoke about something that interested me– the idea of a porous, infinite book. He talked about his unique process of writing [How To Be Black](http://www.baratunde.com/howtobebblack) <http://www.baratunde.com/howtobebblack>, the coolest part of which was the idea of “live-writing.” <http://www.baratunde.com/blog/2011/7/7/my-first-experience-live-writing-a-howtobebblack-chapter-for.html> Live-writing entails publicizing a web link where anyone may view a broadcast of the author's computer screen as he works. I think this is a really cool idea. Anybody who works on a computer could try this “open process”–a video editor, a graphic designer, an architect. Baratunde said he did not pay attention to the comment stream as he worked, however he did review the comments at the close of a writing session. I like how this, as a gesture, takes some of the mystique out of creative work. Now that the book is printed, he uses Twitter provocations and other web means to keep the conversation flowing and open. He views the final book as porous– not a finite, bound object. In the 21st century, printing no longer implies that a book is complete. I like this infinity idea because it feels truer to the way people really interact with a text–always citing, discussing, debating, revising.



http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/04/zach_sims_codecademy.jpg

Zach Sims of Codecademy argues that in the 21st century, “understanding algorithms” ought to be added to the core skills of Reading, Writing and Arithmetic.

I liked what [Charles Best](http://twitter.com/#1/charlesbest) had to say about “pushing intelligence out to the edge.” The phrase comes from the security industry, referring to advanced device networks where a non-central node in the network can make intelligent decisions without querying the central node. Charles is excited about web platforms like [Kickstarter](http://www.kickstarter.com), [Etsy](http://www.etsy.com) and his own website, [Donors Choose](http://www.donorschoose.org/about/meet_the_team.html), because they jettison the traditional gatekeepers and middlemen of cultural production, pushing [cultural] intelligence out to the public, which allows good ideas to come to life more easily and quickly. Charles pointed out another great outcome of pushing intelligence out to the edge, which is that “solutions can come from the front lines.” Many good examples of this phenomenon are included in our [Design With The Other 90%](http://www.designother90.org/cities/about) exhibition series. The 90% series features lots of design solutions for different problems that originate from the end users themselves. There’s no need for products and services to come down from on high (governments, large companies, powerful institutions) any more. If you are interested in this topic, check out the [Social Impact Design Summit](http://www.cooperhewitt.org/blog/2012/02/21/social-impact-design-summit) we held early this year.

In sum, decentralization of ideas, learning, and teaching was the major theme of the day.

I thought the day could have been even better if someone had discussed an important group of concepts: prestige, class & social mobility. If we’re really going to re-imagine education for the 21st century in an inclusive, sweeping way (which was, I think, what the conference organizers intended) it’s important to keep aware of the different meanings “education” has for all. There’s a powerful association in our culture between education and social mobility. [Adam Braun’s](http://www.pencilsofpromise.org/blog/about-us/about-adam-braun) talk about building schools in Laos, Nicaragua and Guatemala did introduce the idea of access, but nobody made the more challenging mindset leap—it’s the shorter leap—to the complicated, insidious disparities in our own city. The opportunity to affiliate oneself with the status and high regard of a respected institution is a privilege. I think it’s a mistake to excessively glamorize an informal educational ethos without acknowledging the reality that going out on a rebellious limb is most comfortable for those with an economic safety net. Hacking education is great, but the traditional currencies of prestige and status can’t be omitted from a conversation about transforming education for all.

This entry was posted in Education <http://labs.cooperhewitt.org/category/education/> *on April 23, 2012* [<http://labs.cooperhewitt.org/2012/skillshare-conference-recap/>] *by katieshelly* <http://labs.cooperhewitt.org/author/katieshelly/>.

Totally cached out

We do a good deal of cacheing on our web properties here at Cooper-Hewitt.

Our web host, [PHPFog](http://phpfog.com) <http://phpfog.com> adds a layer of cacheing for free known as [Varnish](https://www.varnish-cache.org/) <https://www.varnish-cache.org/> cache. Varnish Cache sits in front of our web servers and performs what is known as [reverse proxy cacheing](http://en.wikipedia.org/wiki/Reverse_proxy) http://en.wikipedia.org/wiki/Reverse_proxy. This type of cacheing is incredibly important as it adds the ability to quickly serve cached files to users on the Internet vs. continually recreating dynamic web-pages by making calls into the database.

For static assets such as images, javascripts, and css files, we turn to [Amazon's CloudFront CDN](http://aws.amazon.com/cloudfront) <http://aws.amazon.com/cloudfront>. This type of technology ([which I've mentioned in a number of other posts here](http://labs.cooperhewitt.org/tag/cloudfront/) <http://labs.cooperhewitt.org/tag/cloudfront/>) places these static assets on a distributed network of "edge" locations around the world, allowing quicker access to these assets geographically speaking, and as well, it removes a good deal of burden from our application servers.

However, to go a bit further, we thought of utilizing [memcache](http://memcached.org/) <http://memcached.org/>. Memcache is an in-memory database key-value type cacheing application. It helps to speed up calls to the database by storing as much of that information in memory as possible. This has been proven to be extremely effective across many gigantic, database intensive websites like Facebook, Twitter, Tumblr, and Pinterest (to name just a few). Check [this interesting post](https://www.facebook.com/note.php?note_id=39391378919) https://www.facebook.com/note.php?note_id=39391378919 on scaling memcached at Facebook.

To get started with memcache I turned to [Amazon's Elasticache](http://aws.amazon.com/elasticache/) <http://aws.amazon.com/elasticache/> offering. Elasticache is essentially a managed memcache server. It allows you to spin up a memcache cluster in a minute or two, and is super easy to use. In fact, you could easily provision a terabyte of memcache in the same amount of time. There is no installation, configuration or maintenance to worry about. Once your memcache cluster is up and running you can easily add or remove nodes, scaling as your needs change on a nearly real-time basis.

Check this video for a more in-depth explanation.

Elasticache also works very nicely with our servers at PHPFog as they are all built on Amazon EC2, and are in fact in the same data center. To get the whole thing working with our [labs](#).

[cooperhewitt.org](http://labs.cooperhewitt.org) <http://labs.cooperhewitt.org> blog, I had to do the following.

1. Create a security group. In order for PHPFog to talk to your own Elasticache cluster, you have to create a security group that contains PHPFog's AWS ID. There is [documentation on the PHPFog website](http://dev.appfog.com/features/article/amazon_rds) http://dev.appfog.com/features/article/amazon_rds on how to do this for use with an Amazon RDS server, and the same steps apply for Elasticache.
2. Provision an Elasticache cluster. I chose to start with a single node, m1.large instance which gives me about 7.5 Gig of RAM to work with at \$0.36 an hour per node. I can always add more nodes in the future if I want, and I can even roll down to a smaller instance size by simply creating another cluster.
3. Let things simmer for a minute. It takes a minute or two for your cluster to initialize.
4. On WordPress install the [W3TC plugin](http://wordpress.org/extend/plugins/w3-total-cache/) <http://wordpress.org/extend/plugins/w3-total-cache/>. This plugin allows you to connect up your Elasticache server, and as well offers tons of configurable options for use with things like a CloudFront CDN and more. Its a must have! If you are on Drupal or some other CMS. there are similar modules that achieve the same result.
5. In W3TC enable whatever types of cacheing you wish to do and set the cache type to memcache. In my case, I chose page cache, minify cache, database cache, and object cache, all of which work with memcache. Additionally I set up our CloudFront CDN from within this same plugin.
6. In each cache types config page, set your memcache endpoint to the one given by your AWS control panel. If you have multiple nodes, you will have to copy and paste them all into each of these spaces. There is a test button you can hit to make sure your installation is communicating with your memcache server.

That last bit is interesting. You can have multiple clusters with multiple nodes serving as cache servers for a number of different purposes. You can also use the same cache cluster for multiple sites, so long as they are all reachable via your security group settings.

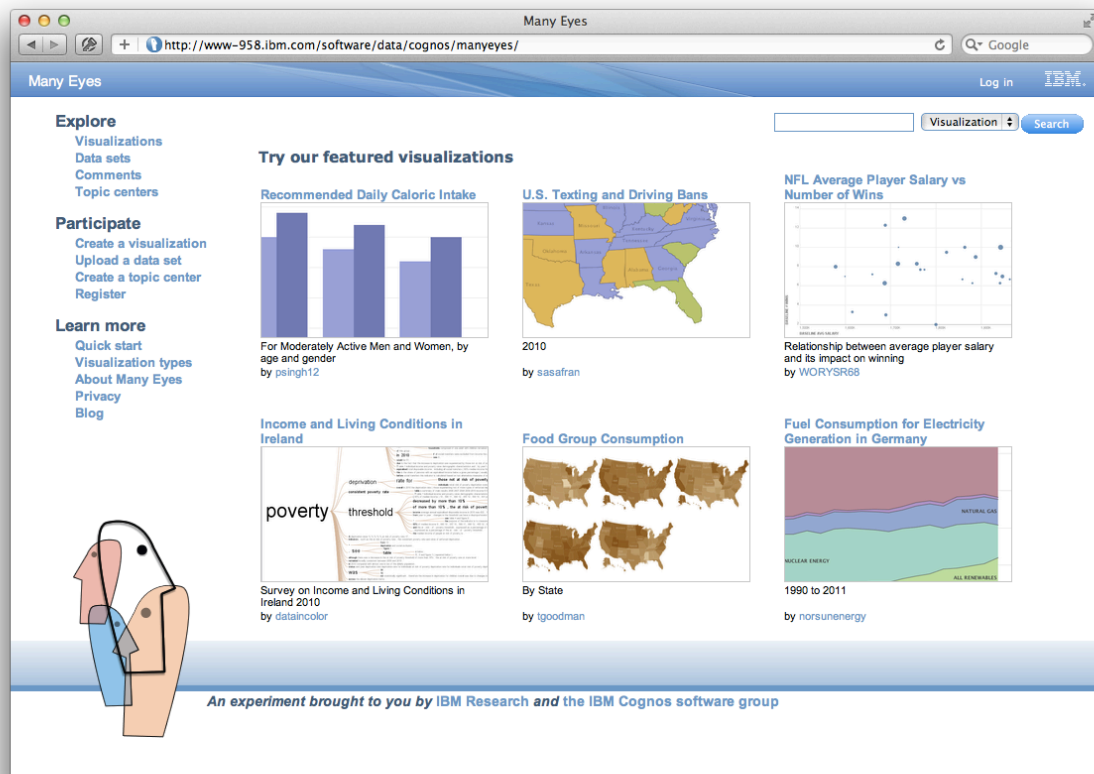
Once everything is configured and working you can log out and let the cacheing being. It helps to click through the site to allow the cache to build up, but this will happen automatically if your site gets a decent amount of traffic. In the AWS control panel you can check on your cache cluster in the [CloudWatch](http://aws.amazon.com/cloudwatch) <http://aws.amazon.com/cloudwatch> tab where you can keep track of how much memory and cpu is being utilized at any given time. You can also set up alerts so that if you run out of cache, you get notified so you can easily add some nodes.

We hope to employ this same cacheing cluster on our main cooperhewitt.org [http://cooperhewitt-](http://cooperhewitt.org)

t.org website, as well as a number of our other web properties in the near future.

This entry was posted in Backends <http://labs.cooperhewitt.org/category/backends/>, *CH 3.0* <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged amazon* <http://labs.cooperhewitt.org/tag/amazon/>, *aws* <http://labs.cooperhewitt.org/tag/aws/>, *cdn* <http://labs.cooperhewitt.org/tag/cdn/>, *cloudfront* <http://labs.cooperhewitt.org/tag/cloudfront/>, *elasticache* <http://labs.cooperhewitt.org/tag/elasticache/>, *memcache* <http://labs.cooperhewitt.org/tag/memcache/>, *phpfog* <http://labs.cooperhewitt.org/tag/phpfog/>, *varnish* <http://labs.cooperhewitt.org/tag/varnish/> *on April 23, 2012* [\[http://labs.cooperhewitt.org/2012/totally-cached/\]](http://labs.cooperhewitt.org/2012/totally-cached/) *by micah* <http://labs.cooperhewitt.org/author/micah/>.

People playing with collections #14: collection data on Many Eyes



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/04/Screen-Shot-2012-04-24-at-4.21.14-PM.png>

Many Eyes Website

I love seeing examples of uses of our collection metadata in the wild. [bartdavis](http://www-958.ibm.com/software/data/cognos/manyeyes/users/bartdavis) <http://www-958.ibm.com/software/data/cognos/manyeyes/users/bartdavis> has uploaded our data to [Many Eyes](http://www-958.ibm.com) <http://www-958.ibm.com> and created a [few visualizations](http://www-958.ibm.com/software/data/cognos/manyeyes/visualizations?q=cooper-hewitt) <http://www-958.ibm.com/software/data/cognos/manyeyes/visualizations?q=cooper-hewitt>.

I found it interesting to see how many “matchsafes” we have in the collection, as you can easily see in the “color blindness test” inspired bubble chart! Here are a few screen grabs, but check them out for yourself at <http://www-958.ibm.com> <http://www-958.ibm.com/software/data/cognos/manyeyes/visualizations?q=cooper-hewitt>.

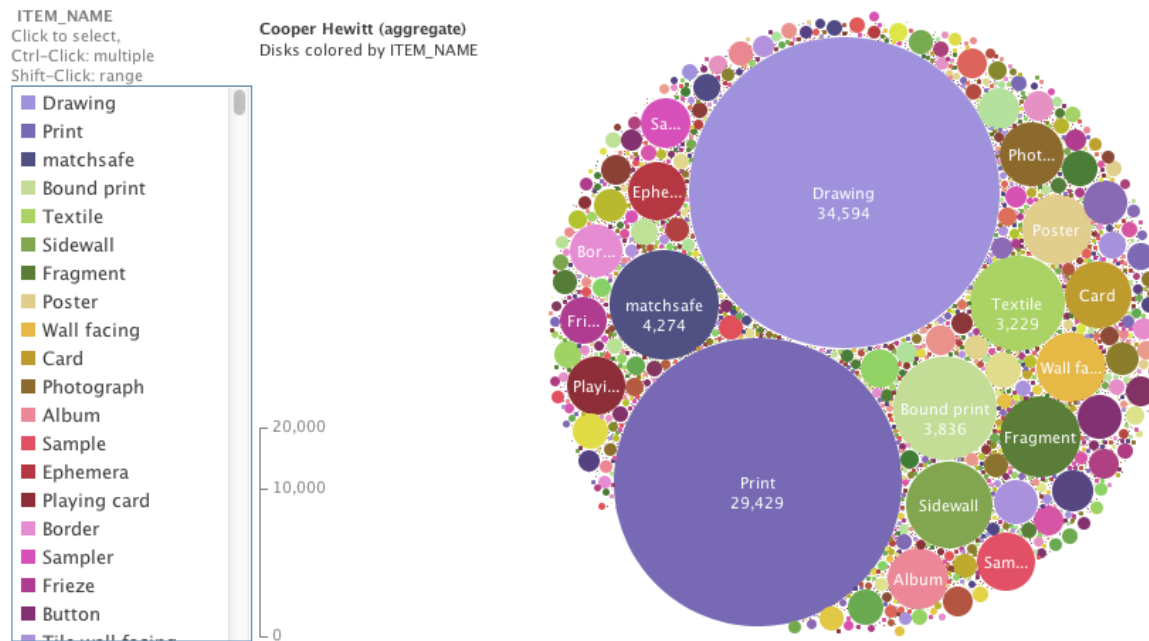
Of interest to us, too, is that these visualisations are only possible because we released the collection data as a single dump. If we had, like many museums, only provided an API, this would not have been possible (or at least been much more difficult) to do.

Visualizations : Object Types in the Cooper-Hewitt Collection

Uploaded by: [bartdavis](#)

Created at: Apr 15 2012

Description: Bubble Chart of the Object Types in the Cooper-Hewitt Collection



<http://labs.cooperhewitt.org.s3.amazonaws.com/wp-content/uploads/2012/04/Screen-Shot-2012-04-24-at-1.57.27-PM.png>

Bubble chart of object types

Created at: Apr 21 2012

| Century | Books Published |
|-----------------|-----------------|
| 11th Century BC | 0 |
| 10th Century BC | 0 |
| 9th Century BC | 0 |
| 8th Century BC | 0 |
| 7th Century BC | 0 |
| 6th Century BC | 0 |
| 5th Century BC | 0 |
| 4th Century BC | 0 |
| 3rd Century BC | 0 |
| 2nd Century BC | 0 |
| 1st Century BC | 0 |
| 1st Century AD | 0 |
| 2nd Century AD | 0 |
| 3rd Century AD | 0 |
| 4th Century AD | 0 |
| 5th Century AD | 0 |
| 6th Century AD | 0 |
| 7th Century AD | 0 |
| 8th Century AD | 0 |
| 9th Century AD | 0 |
| 10th Century AD | 0 |
| 11th Century AD | 0 |
| 12th Century AD | 0 |
| 13th Century AD | 0 |
| 14th Century AD | 0 |
| 15th Century AD | 500 |
| 16th Century AD | 1,500 |
| 17th Century AD | 7,500 |
| 18th Century AD | 11,500 |
| 19th Century AD | 15,000 |
| 20th Century AD | 5,000 |
| 21st Century AD | 5,000 |

Number of objects by century

Created at: Apr 15 2012

Edit Language Font Layout Color



Word cloud of object types

This entry was posted in *Collection data* <http://labs.cooperhewitt.org/category/collection-data/> *and tagged* *collections* <http://labs.cooperhewitt.org/tag/collections/>, *data* <http://labs.cooperhewitt.org/tag/data/>, *meta* <http://labs.cooperhewitt.org/tag/meta/>, *visualization* <http://labs.cooperhewitt.org/tag/visualization/> *on April 25, 2012* [<http://labs.cooperhewitt.org/2012/collection-data-eyes/>] *by micah* <http://labs.cooperhewitt.org/author/micah/>.

Building Design Week NYC with Ushahidi

Today we pushed an event aggregator site for [Design Week NYC](http://designweeknyc.org) <http://designweeknyc.org> out into the world.

Pulled together quickly in response to community need, we used the open source [Ushahidi](http://ushahidi.com) <http://ushahidi.com> platform, usually used for emergency situations. We jokingly talked about using it to 'tackle a design emergency'.

The screenshot shows the Design Week NYC website. At the top, it says "Design Week NYC" and "Login". Below that, it says "Powered by Smithsonian Cooper-Hewitt, National Design Museum". There is a language selector set to "English (US)" and a "SEARCH" button. A large banner features the text "DESIGN WEEK NYC" over a map of New York City. Below the banner is a navigation bar with links: "HOME", "EVENTS", "SUBMIT AN EVENT", "GET ALERTS", and "CONTACT US". The main content area displays a map of New York City with numerous red location pins indicating events. A "Filter Events By" dropdown menu is visible on the left. Below the map, there are logos for various partners: "ICFF INTERNATIONAL CONTEMPORARY FURNITURE FAIR", "{WANTED} Design", "AmDC", "MODEL CITIZENS NYC2012", and "Noho Design District". At the bottom, there are two sections: "Events" and "Shuttle Bus Route". The "Events" section lists two events: "AIGANY 30TH ANNIVERSARY BENEFIT GALA" at "The Woolly" on "Jun 1 2012", and "AIGANY GREATEST HITS" at "SVA Theater" on "May 22 2012". The "Shuttle Bus Route" section includes a PDF icon and a link to "click to download PDF" next to a bus icon.

Design Week NYC

Login

Powered by Smithsonian Cooper-Hewitt, National Design Museum

English (US)

SEARCH

SUBMIT AN EVENT

DESIGN WEEK NYC

HOME EVENTS SUBMIT AN EVENT GET ALERTS CONTACT US

Filter Events By

How to

Scale = 1 : 54K EPSG:900913

ICFF[®]
INTERNATIONAL
CONTEMPORARY
FURNITURE FAIR[®]

{WANTED} Design

AmDC

MODEL
CITIZENS
NYC2012

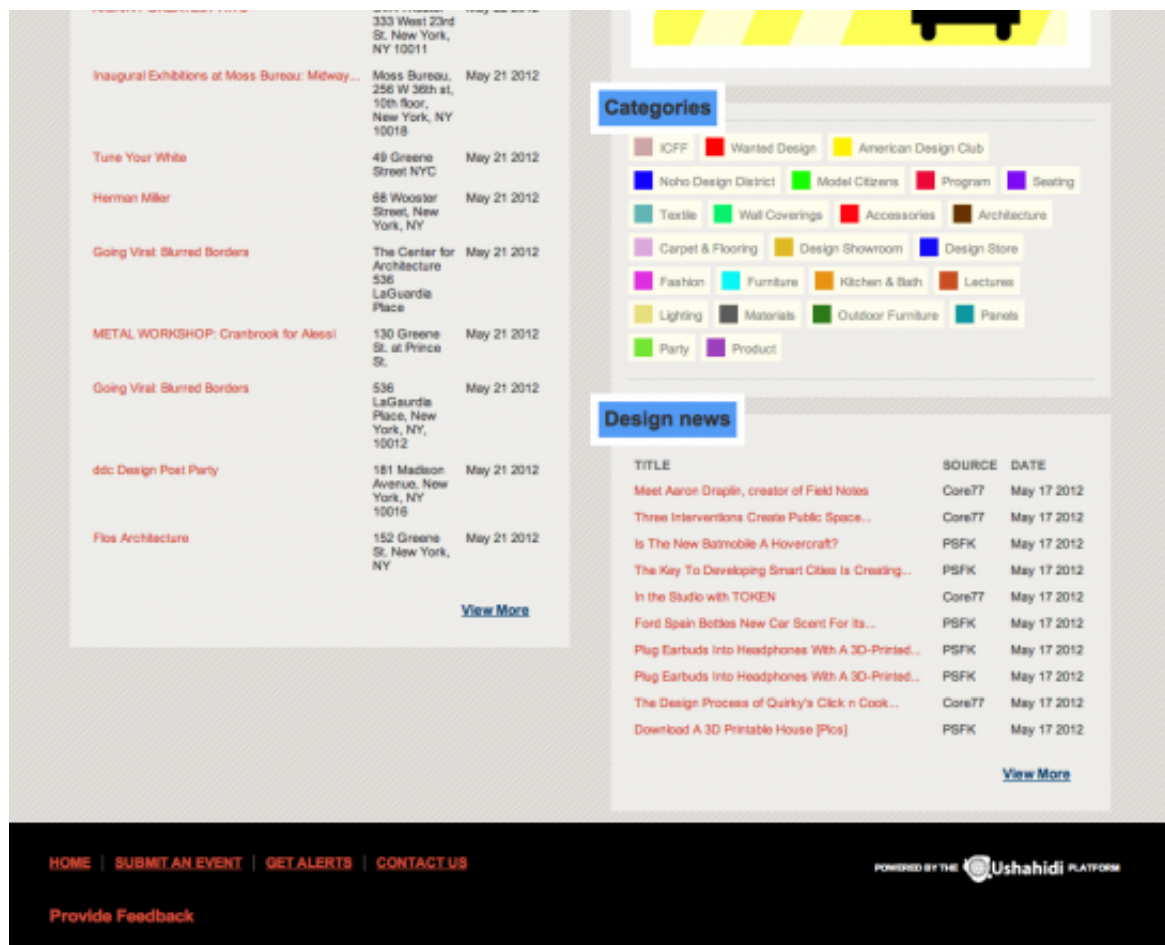
Noho
Design
District

Events

Shuttle Bus Route

| TITLE | LOCATION | DATE |
|--------------------------------------|---|-------------|
| AIGANY 30TH ANNIVERSARY BENEFIT GALA | The Woolly 233 Broadway New York, NY 10007 | Jun 1 2012 |
| AIGANY GREATEST HITS | SVA Theater | May 22 2012 |

PDF click to download PDF



<http://designweeknyc.org>

Micah answered a couple of questions about the project.

Why Ushahidi? What was Cooper-Hewitt's relationship with them, if any?

When our communications and marketing team approached us with this project, I immediately thought of Ushahidi. We had recently featured Ushahidi in our Design with the [Other 90%: CITIES exhibition](http://www.designother90.org/cities/solutions/map-kibera) <http://www.designother90.org/cities/solutions/map-kibera>, and through this I had grown to know their platform. Although originally designed for use with emergency situations and election monitoring (or Wall Street occupying) I thought that it could easily be customized to make sense for a city-wide week of related events. it seemed a perfect fit.

Ushahidi is an open source platform that is very much in development. Were there any tensions between using it 'out of the box' and the desired functionality?

Yes, we had to customize it to suit our needs. The main issue was the nomenclature Ushahidi has baked in across the platform. For example, the term “reports” didn’t really fit the vision we had for our deployment, as we would be mainly listing “events.” However, it turned out that this was fairly easy to remedy as the dev team at Ushahidi has done a decent job in compartmentalizing these kinds of things in the source code. The platform is also theme based, much like WordPress, so we were able to customize the overall look and feel of the site to our liking.

Some other issues we have come across have to do with the basic workflow. In a typical Ushahidi deployment, people on the ground submit reports. Its pretty straight forward. For our site, it would make more sense to create a list of events on a running basis and then allow the use of SMS and email and twitter to essentially comment and “check in.” It’s really only a matter of associating these things with the right data model, but this is failry rigid at the moment within the Ushahidi platform.

What were some of the major technical difficulties in getting it up and running?

Ushahidi has a lot of moving parts. Getting a basic install up and running is pretty easy (about as easy as installing WordPress) but it took some time to figure out how to integrate the site with the wide variety of plugins and add ons that are required to make the site really work. Functionality like following a twitter hashtag, submitting events via email or text took a little effort to get working properly.

Can you imagine a less-emergency-oriented fork of Ushahidi for these sorts of event planner operations?

Yes! I think it would be great to either fork Ushahidi for sites like ours that are more event driven and less “reporting.” However, I also sort of wonder if the dev team at Ushahidi might consider redesigning the core to make some of this a little more flexible. I’d also love to see them help prepare open sourced iPhone code for a more custom app deployment. There was a [great article about using Ushahidi](http://www.readwriteweb.com/archives/roll_your_own_foursquare_ushahidi_launches_open-so.php) http://www.readwriteweb.com/archives/roll_your_own_foursquare_ushahidi_launches_open-so.php to essentially “roll your own” foursquare. The platform supports the idea of checkins via the iPhone app, though this part of the project seems to be fairly beta at the moment.

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged beta* <http://labs.cooper->

[hewitt.org/tag/beta/](http://labs.cooperhewitt.org/tag/beta/), *opensource* <http://labs.cooperhewitt.org/tag/opensource/>, *ushahidi* [http://labs.cooperhewitt-](http://labs.cooperhewitt.org/tag/ushahidi/)
[t.org/tag/ushahidi/](http://labs.cooperhewitt.org/2012/building-design-week-nyc-ushahidi/) *on May 17, 2012* [<http://labs.cooperhewitt.org/2012/building-design-week-nyc-ushahidi/>] *by Seb*
Chan <http://labs.cooperhewitt.org/author/seb/>.

Learning from data. Part 372

Here's an interesting image which shows a heat map of the mouse clicks in the last week on a page element on [the *Graphic Design: Now In Production* page](http://www.cooperhewitt.org/exhibitions/now-in-production) <http://www.cooperhewitt.org/exhibitions/now-in-production>.

in-production.



<http://3ug4i->

i3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/06/heatmap.png

We are using a tool called [Reinvigorate](http://reinvigorate.net/) <http://reinvigorate.net/> to generate these. And the data to help us figure out whether certain UI elements are working or not – before we do a whole-sale redesign and rebuild.

Surprisingly we're seeing a lot of interaction with the image gallery slideshow – far more than what we are seeing on a much more prominent video element on the same page.

What can we learn from this?

What should we change as a result of this data?

If anything, we are rolling out more analytics tools across our digital projects to help us bet-

ter understand the behaviour of visitors.

And as we redesign our physical museum spaces we are looking at a number of different tools to help us do this in 'meatspace' http://en.wikipedia.org/wiki/Real_life as well.

Might our future galleries as be as reconfigurable as our digital projects? Could we begin to treat our galleries as having this down specific UI elements?

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged analytics* <http://labs.cooperhewitt.org/tag/analytics/>, *UI* <http://labs.cooperhewitt.org/tag/ui/>, *UX* <http://labs.cooperhewitt.org/tag/ux/> *on June 14, 2012* [<http://labs.cooperhewitt.org/2012/learning-data-part-372/>] *by Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

Mia Ridge explores the shape of Cooper-Hewitt collections

Or, “what can you learn about 270,000 records in a week?”

Guest post by Mia Ridge.

I’ve just finished a weeks’ residency at the Cooper-Hewitt, where Seb had asked me to look at ‘the shape of their [collection](http://collection.cooperhewitt.org/)’. Before I started a PhD in Digital Humanities I’d spent a lot of time [poking around collections databases for various museums](http://www.miaridge.com/aboutme/), but I didn’t know much about the Cooper-Hewitt’s collections so this was a nice juicy challenge.

What I hoped to do

Museum collections are often accidents of history, the result of the personalities, trends and politics that shaped an institution over its history. I wanted to go looking for stories, to find things that piqued my curiosity and see where they lead me. How did the collection grow over time? What would happen if I visualised materials by date, or object type by country? Would showing the most and least exhibited objects be interesting? What relationships could I find between the people listed in the [Artist and Makers](http://collection.cooperhewitt.org/people/view) tables, or between the collections data and the [library](http://www.cooperhewitt.org/collections/library)? Could I find a pattern in changing sizes of different types of objects over time – which objects get bigger and which get smaller over time? Which periods have the most colourful or patterned objects?

I was planning to use records from the main collections database, which for large collections usually means some cleaning is required. Most museum collections management systems date back several decades and there’s often a backlog of un-digitised records that need entering and older records that need enhancing to modern standards. I thought I’d iterate through stages of cleaning the data, trying it in different visualisations, then going back to clean up more precisely as necessary.

I wanted to get the easy visualisations like timelines and maps out of the way early with tools like [IBM’s ManyEyes](http://manyeyes.alphaworks.ibm.com/manyeyes/) and [Google Fusion Tables](https://www.google.com/fusiontables/) so I could start to look for patterns in the who, what, where, when and why of the

collections. I hoped to find combinations of tools and data that would let a visitor go looking for potential stories in the patterns revealed, then dive into the detail to find out what lay behind it or pull back to view it in context of the whole collection.

What I encountered

Well, that was a great plan, but that's not how it worked in reality. Overall I spent about a day of my time dealing with the sheer size of the dataset: it's tricky to load 60 meg worth of 270,000 rows into tools that are limited by the number of rows (Excel), rows/columns (Google Docs) or size of file (Google Refine, ManyEyes), and any search-and-replace cleaning takes a long time.

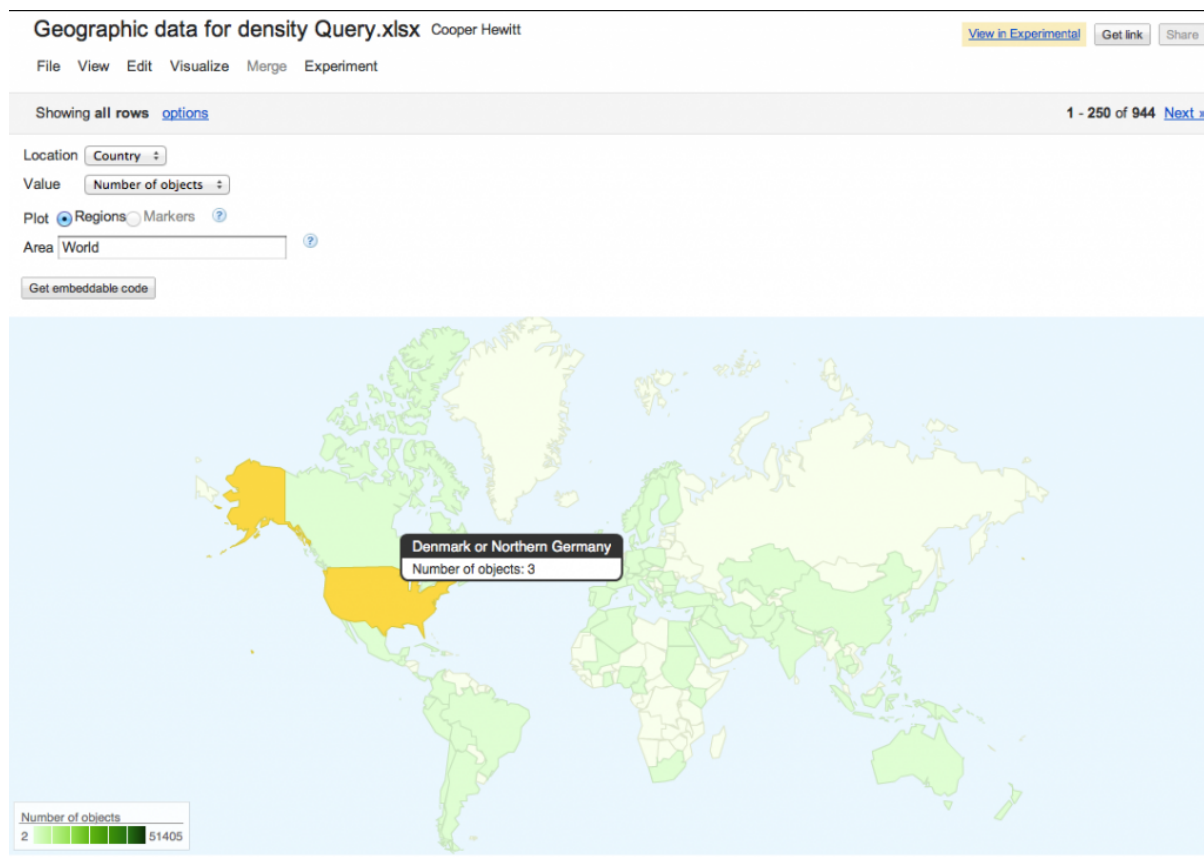
However, the unexpectedly messy data was the real issue – for whatever reason, the Cooper-Hewitt's collections records were messier than I expected and I spent most of my time trying to get the data into a workable state. There were also lots of missing fields, and lots of uncertainty and fuzziness but again, that's quite common in large collections – sometimes it's the backlog in research and enhancing records, sometimes an object is unexpectedly complex (e.g. '[Begun in Kiryu, Japan, finished in France](http://collection.cooperhewitt.org/view/objects/asitem/id/228798)' <http://collection.cooperhewitt.org/view/objects/asitem/id/228798>) and sometimes it's just not possible to be certain about when or where an object was from (e.g. 'Bali? Java? Mexico?'). On a technical note, some of the fields contained 'hard returns' which cause problems when exporting data into different formats. But the main issue was the variation and inconsistency in data entry standards over time. For example, sometimes fields contained additional comments – this certainly livened up the Dimensions fields but also made it impossible for a computer to parse them.

In some ways, computers are dumb. They don't do common sense, and they get all 'who moved my cheese' if things aren't as they expect them to be. Let me show you what I mean – here are some of the different ways an object was listed as coming from the USA:

- U.S.
- U.S.A
- U.S.A.
- USA
- United States of America
- United States (case)

We know they all mean exactly the same place, but most computers are completely baffled by

variations in punctuation and spacing, let alone acronyms versus full words. The same inconsistencies were evident when uncertainties were expressed: it might have been interesting to look at the sets of objects that were made in 'U.S.A. or England' but there were so many variations like 'U.S.A./England ?' and 'England & U.S.A.' that it wasn't feasible in the time I had. This is what happens when tools encounter messy data when they expect something neat:



<http://3ug4ii3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/06/DenmarkorGermany.png>

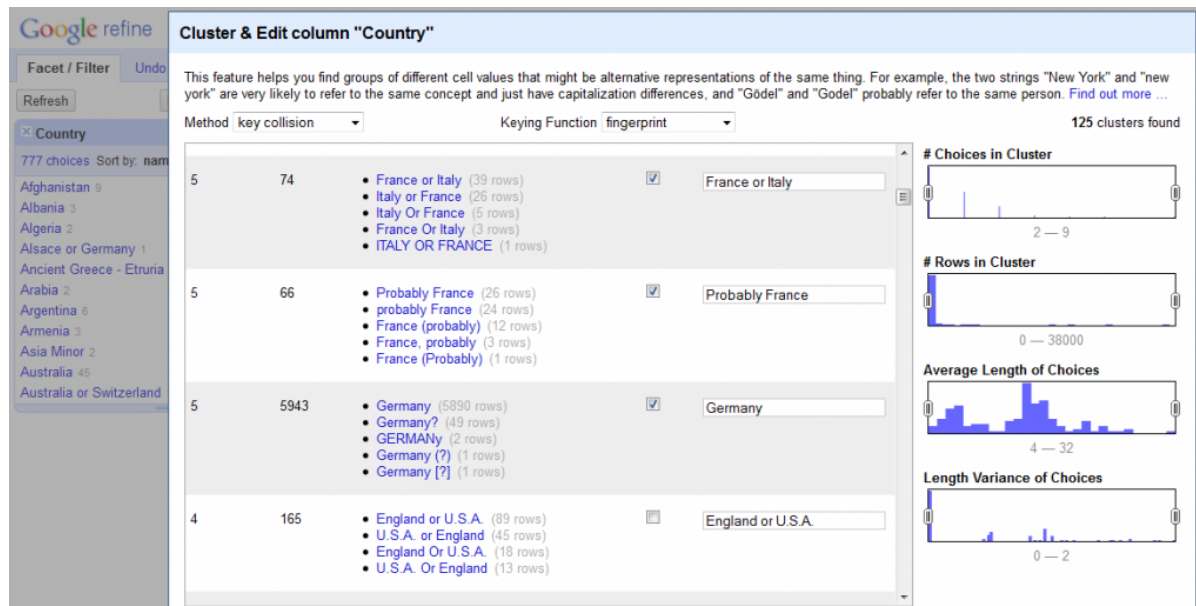
3 objects from 'Denmark or Germany'? No! Messy data confuses geocoding software.

Data cleaning for fun and profit

I used [Google Refine](http://code.google.com/p/google-refine/) <http://code.google.com/p/google-refine/> to clean up the records then upload them to Google Fusion or Google Docs for test visualisations. Using tools that let me move data between them was the nearest I could get to a workflow that made it easy to tidy records iteratively without being able to tidy the records at source.

Refine is an amazing tool, and I would have struggled to get anywhere without it. There are some great videos on how to use it at freeyourmetadata.org <http://freeyourmetadata.org/>, but in short,

it helps you 'cluster' <https://code.google.com/p/google-refine/wiki/Clustering> potentially similar values and update them so they're all consistent. The screenshot below shows Refine in action.



<http://3ug4ii3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/06/GoogleRefine.png>

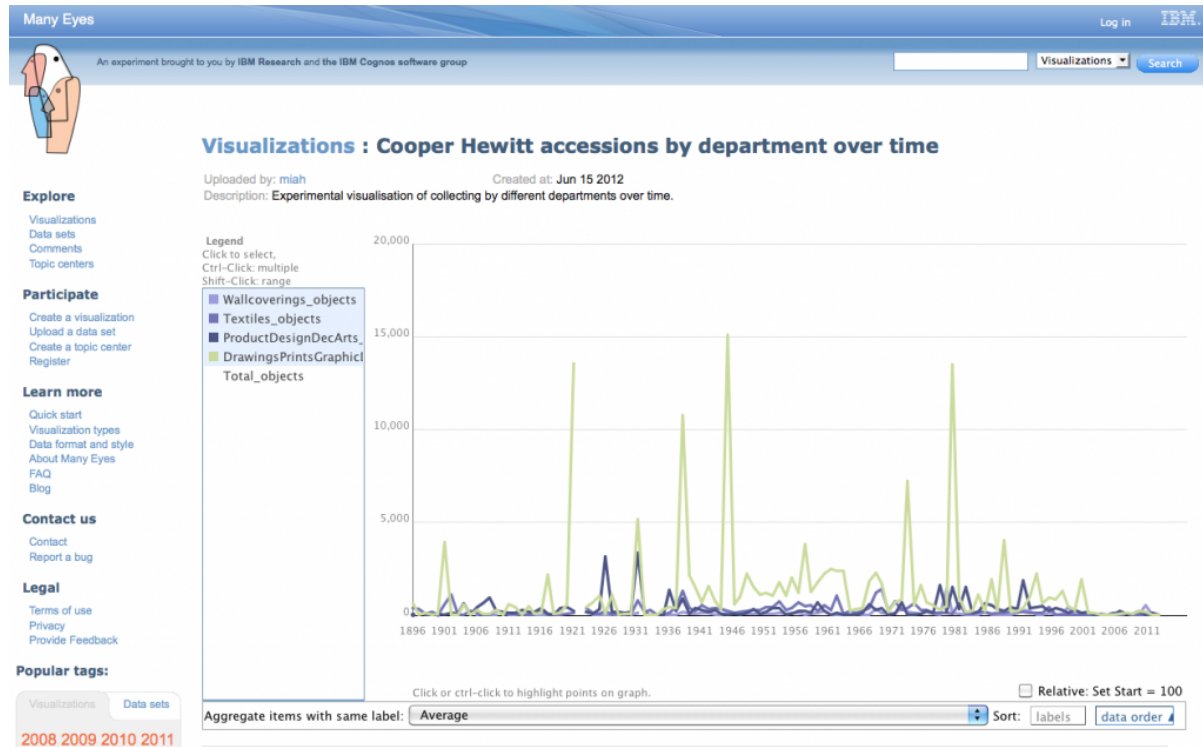
Google Refine in action

One issue is that museums tend to use question marks to record when a value is uncertain, but Refine strips out all punctuation, so you have to be careful about preserving the distinction between certain and uncertain records (if that's what you want). The suitability of general tools for cultural heritage data is a wider issue – a generic timeline generator doesn't know what year to map 'early 17th century' to so it can be displayed, but date ranges are often present in museum data, and flattening it to 1600 or 1640 or even 1620 is a false level of precision that has the appearance of accuracy.

When were objects collected?

Having lost so much time to data cleaning without resolving all the issues, I eventually threw nuance, detail and accuracy out the window so I could concentrate on the overall shape of the collection. Working from the assumption that [object accession numbers](https://en.wikipedia.org/wiki/Accession_number_%28library_science%29) https://en.wikipedia.org/wiki/Accession_number_%28library_science%29 reflected the year of accession and probably the year of acquisition, I processed the data to extract just the year, then plotted it as accessions by department and total accessions by year. I don't know the history of the Cooper Hewitt well enough to understand why certain years have huge peaks, but I can get a sense of the possible stories

hidden behind the graph – changes of staff, the effect of World War II? Why were 1938 and 1969 such important years for the Textiles Department, or 1991 for the Product Design and Decorative Arts Department?

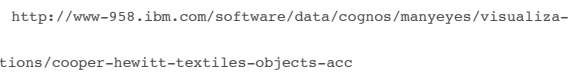


<http://www-958.ibm.com/software/data/cognos/manyeyes/visualizations/cooper-hewitt-accessions-by-depart>

Accessions by Year for all Departments

Or try the [interactive version](http://www-958.ibm.com/software/data/cognos/manyeyes/visualizations/cooper-hewitt-accessions-by-depart) available at ManyEyes.

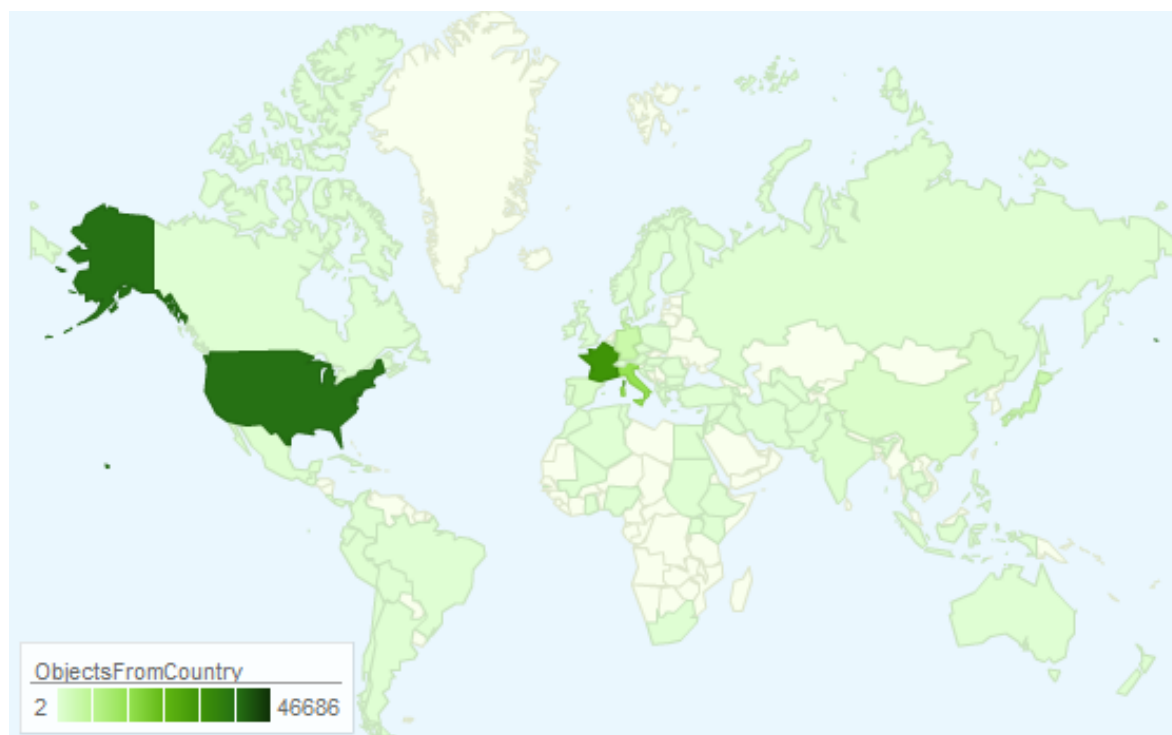
I also tried visualising the [Textiles data as a bubble chart](http://www-958.ibm.com/software/data/cognos/manyeyes/visualizations/cooper-hewitt-textiles-objects-acc) to show the years when lots of objects were collected in a different way:



Accessions for Textiles Department by year

Where are objects from?

I also made a map which shows which countries have been collected from most intensively. To get this display, I had to remove out any rows that had values that didn't exactly match the name of just one country, etc, so it doesn't represent the entire collection. But you can get a sense of the shape of the collection – for example, there's a strong focus on the US and Western Europe objects.



https://www.google.com/fusiontables/embedviz?viz=GVIZ&t=MAP&gco_region=world&gco_dataMode=regions&containerId=gviz_canvas&q=select+gvizcountry%28col0%29%2C+col1%2C+col0+from+19Wuxyb12xrM1vn828Xi3XPhb4nlCgZnb_Hu188k&qrs=+where+gvizcountry%28col0%29+%3E%3D+&qre=+and+gvizcountry%28col0%29+%3C%3D+&qe=+limit+134&width=500&height=300

Object sources by country

The interactive version is available at <http://bit.ly/Ls572u> <http://bit.ly/Ls572u>.

This also demonstrates the impact of the different tools – I’m sure the Cooper-Hewitt has more than 43 objects from the countries (England, Scotland, Wales and Northern Ireland) that make up the United Kingdom but Google’s map has only picked up references to ‘United Kingdom’, effectively masking the geo-political complexities of the region and hiding tens of thousands of records.

Linking Makers to the rest of the web

Using [Refine’s Reconciliation tool](https://code.google.com/p/google-refine/wiki/Reconciliation) <https://code.google.com/p/google-refine/wiki/Reconciliation>, I automatically ‘reconciled’ or matched 9000 names in the Makers table to records in Freebase. For example, the Cooper-Hewitt records about Gianni Versace were linked to the [Freebase page about him](http://www.freebase.com/view/en/gianni_versace) http://www.freebase.com/view/en/gianni_versace, providing further context for objects related to him. By linking them to a URL that identifies the subject of a record, those records can now be part of

the web, not just on the web. However, as might be expected with a table that contains a mixture of famous, notable and ordinary people, Refine couldn't match everything with a high level of certainty so 66453 records are left as an exercise for the reader.

I also had a quick go at graphing the [different roles that occurred in the Makers](#)

[table](#) https://www.google.com/fusiontables/embedviz?viz=GVI&t=BAR&containerId=gviz_canvas&q=select+col6,+count%28%29+from+1I9K5x4m-jaPrmuuxZMzft_oCHhmBi59YTNUq2YpI&qrs=+where+col6+%3E%3D+&qre=+and+col6+%3C%3D+&qe=+group+by+col6+limit+94&width=1000&height=2000 .

The benefit of hindsight, and thoughts for the future

With hindsight, I would have stuck with a proper database for data manipulation because trying to clean really large datasets with consumer tools is cumbersome. I also would have been less precious about protecting the detail and nuance of the data and been more pragmatic and ruthless about splitting up files into manageable sizes and tidying up inconsistencies and uncertainties from the start. I possibly should have given up on the big dataset and concentrated on seeing what could be done with the more complete, higher quality records.

The quality of collections data has a profound impact of the value of visualisations and mashups. The collections records would be more usable in future visualisations if they were tidied in the source database. A tool like Google Refine can help create a list of values to be applied and provide some quick wins for cleaning date and places fields. Uncertainty in large datasets is often unavoidable, but with some tweaking Refine could also be used to provide suggestions for representing uncertainty more consistently. I'm biased as crowdsourcing is the subject of my PhD, but asking people who use the collections to suggest corrections to records or help work through the records that can't be cleaned automatically could help deal with the backlog. Crowdsourcing could also be used to help match more names from the various People fields to pages on sites like Freebase and Wikipedia.

If this has whetted your appetite and you want to have a play with some of Cooper-Hewitt's data, check out [Collection Data Access & Download](#) <http://www.cooperhewitt.org/collections/data> .

Finally, a big thank you to the staff of the Cooper-Hewitt for hosting me for a week.

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/>, *Collection data* <http://labs.cooperhewitt.org/category/collection-data/> and *tagged collections* <http://labs.cooperhewitt.org/tag/collections/>, *data* <http://labs.cooperhewitt.org/tag/data/>, *dumps* <http://labs.cooperhewitt.org/tag/dumps/>, *open data* <http://labs.cooperhewitt.org/tag/open-data/>, *residents* <http://labs.cooperhewitt.org/tag/residents/> on June 19, 2012 [<http://labs.cooperhewitt.org/2012/exploring->

shape-collections-draft/] *by miaridge* <http://labs.cooperhewitt.org/author/miaridge/>.

Patrick Murray-John hacks our collection at #THATcamp

And following Mia's residency in the Labs we were excited to find out collection data ended up being toyed with at THATCamp.

Patrick Murray-John wrote up his [experience with our data](http://hackingthehumanities.org/post/hacking-cooper-hewitts-data-release-thatcamp-or-how-get-me-work-free), reflecting many of the same issues that Mia came across.

He calls out our CC0 licensing –

If the data had been available via an API, that would have put a huge burden on my site. I could have grabbed the data for the 'period', but to make it useful in my recontextualization of the data, I would have had to grab ALL the data, then normalize it, then display it. And, if I didn't have the rights to do what I needed, I would have had to do that ON EVERY PAGE DISPLAY. That is, without the licensed rights to manipulate and keep the data as I needed, the site would have churned to a halt.

Instead, I could operate on the data as I needed. Because in a sense I own it. It's in the public domain, and I have a site that wants to work with it. That means that the data really matters to me, because it is part of my site. So I want to make it better for my own purposes. But, also, since it is in the public domain, any improvements I make for my own purpose can and should go back into the public domain. Hopefully, that will help others. It's a wonderful, beautiful, feedback loop, no?

As a fork of CC-0 content from github, it sets off a wonderful network of ownership of data, where each node in the network can participate in the happy feedback.

Go read his [full post](http://hackingthehumanities.org/post/hacking-cooper-hewitts-data-release-thatcamp-or-how-get-me-work-free).

This entry was posted in [Collection data](http://labs.cooperhewitt.org/category/collection-data/) and tagged [#thatcamp](http://labs.cooperhewitt.org/tag/thatcamp/), [API](http://labs.cooperhewitt.org/tag/api/), [collection data](http://labs.cooperhewitt.org/tag/collection-data-2/), [dumps](http://labs.cooperhewitt.org/tag/dumps/), [open data](http://labs.cooperhewitt.org/tag/open-data/) on [June 19, 2012](http://labs.cooperhewitt.org/2012/patrick-murray-john-hacks-collection-thatcamp/) by [Seb Chan](http://labs.cooperhewitt.org/author/seb/).

Designing the responsive footer

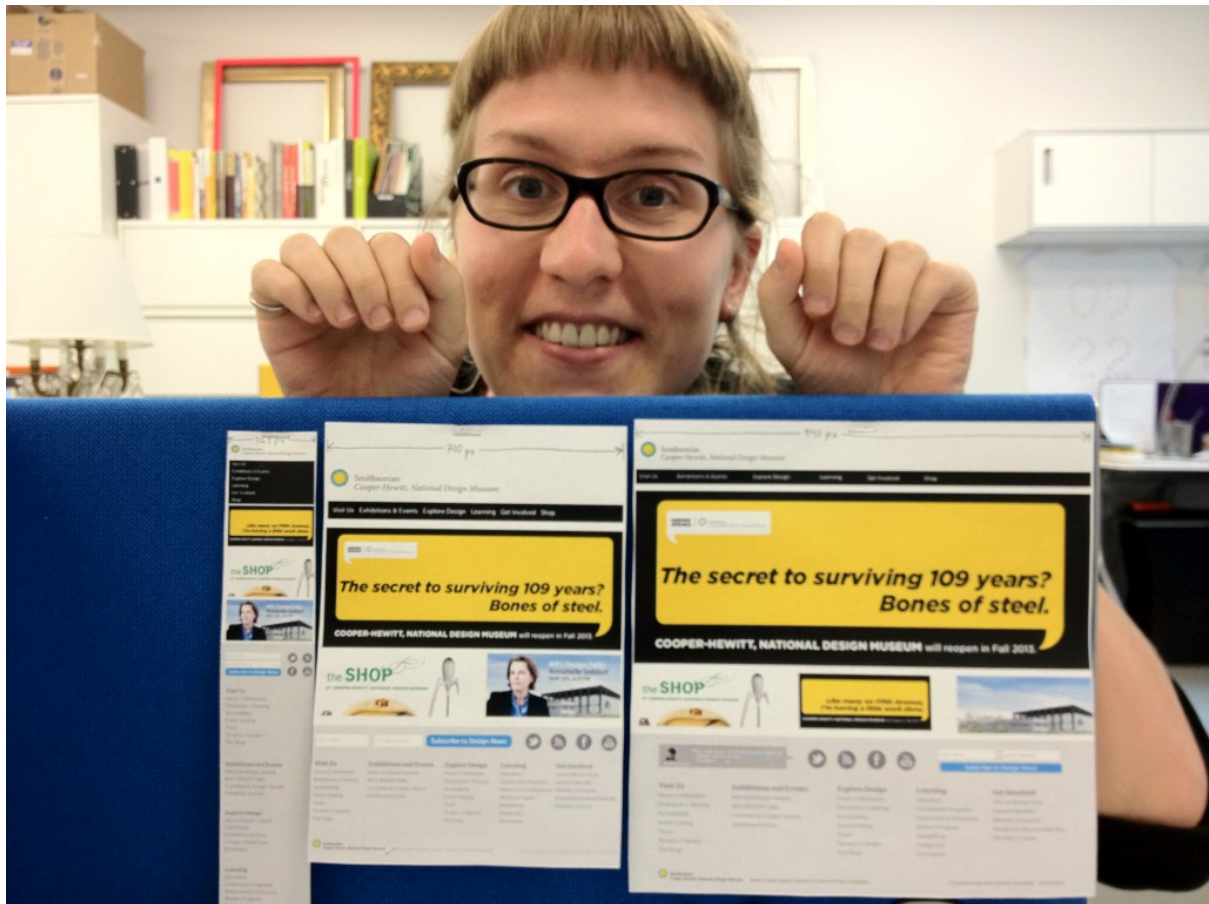
We now have a responsive [main website](http://www.cooperhewitt.org/) <http://www.cooperhewitt.org/> . To a degree.

Like everything it is a stopgap measure before we do a full overhaul of the Cooper-Hewitt online – timed to go live before we [reopen](http://www.cooperhewitt.org/redesign) <http://www.cooperhewitt.org/redesign> our main campus (2014).

With the proportion of mobile traffic to our web properties increasing every month we couldn't wait for a full redesign to implement a mobile-friendly version of the site. So we did some tweaking and with the help of Orion, pulled [responsiveness](http://www.alistapart.com/articles/responsive-web-design/) <http://www.alistapart.com/articles/responsive-web-design/> into the scope for a migration of backends from Drupal 6 to Drupal 7.

Katie did the wireframing and design of the new funky fat footer – which you'll notice, changes arrangements as it switches between enormous (desktop), large (tablet) and mini (mobile) modes.

Here she is explaining the what and why.



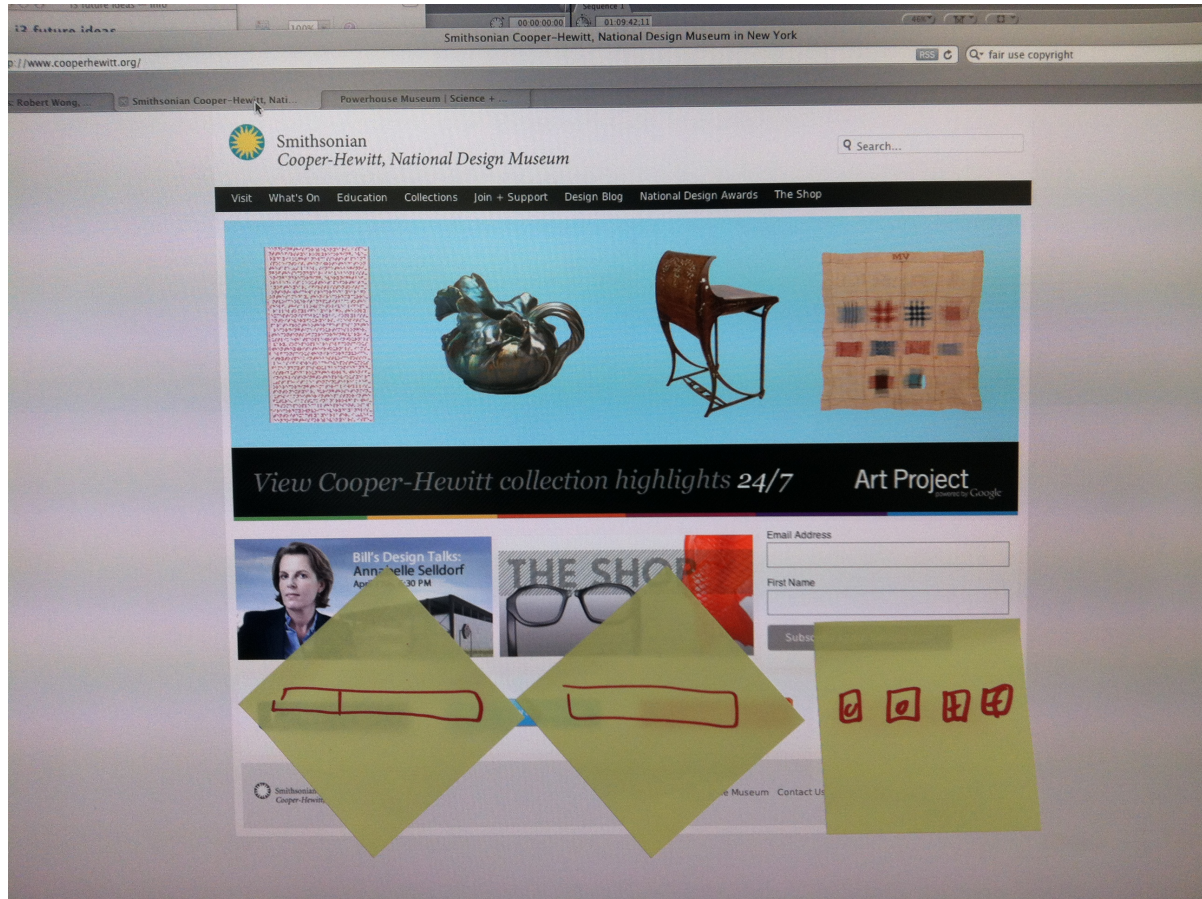
Why did you do paper prototypes for the responsive design?

A few months ago I was working on a design for the [Arts Achieve](http://labs.cooperhewitt.org/2012/deploying-ipads-nyc-schools/#comments) website. I showed my screen to Bill, our [museum director](http://en.wikipedia.org/wiki/Bill_Moggridge), to get his thoughts. Bill is a former industrial designer and one of the [pioneers of interaction design](http://www.designinginteractions.com/book). The first thing he said was “ok, let’s print out a screenshot.” He then drew his suggestions right onto the printed page. We didn’t really look at the screen much during the conversation. Writing directly onto the paper was more immediate and direct, and made his suggestions feel very possible to me. Looking at a site design on a screen makes me feel like I’m looking at something final, even if it’s just a mockup. The same thing printed on paper seems more malleable. It’s a mind trick!

Paper also lets me print out many versions and compare them side-by-side (you can’t do that on a single monitor).

Paper also ALSO lets me walk around showing my print-outs to others and ask for rapid reactions without pulling everyone into a [screen hover session](http://hoveringartdirectors.tumblr.com/). This is

a simple body/communication thing: when everyone is facing toward a screen to talk about a design, you're not in a natural conversational position. Everyone's face and body is oriented toward the screen. I can't see people's faces and expressions unless I twist around. When you're just holding a paper, and there's no screen, it's more like a natural conversation.



<http://3ug4ii3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/06/post-its-on-monitor-labs.jpg>

Post-its stuck to the monitor as a way to quickly agree on our initial ideas

Why do some of the elements move around in the responsive footer? (why do the icons and signups move)

They move around to be graphically pleasing. And to make sure the stuff we wanted people to notice and click on is most prominent.

We had a strong desire for the social media icons to be really prominent. So they're front and center in the monitor-width design (940px width). They're on the right hand side in the tablet-

size design (700px wide) and in the mobile-size design (365px wide) because I think it looks sharpest when the rectilinear components are left-justified and the round stuff is on the right.

What were the challenges for the responsive design?

We had a really clear hierarchy in mind from the beginning (we knew what we really wanted people to notice and click) so that eliminated a lot of complexity. The only challenge was how to serve that hierarchy cleanly.

One challenge was the footer doesn't always graphically harmonize with the body of the page, because the page content is always changing.

Another challenge was getting the latest tweet to be clear and legible, but still appear quiet and ambient and classy.

What were some of the things you are going to be looking out for as it the site goes live?

I want to see how the footer harmonizes with our varying page body content and then decide if it makes sense to change the footer to match the body, or re-style the body content to sit better atop the footer.

I wonder if people on Twitter will start saying stuff @Cooperhewitt just because they know they'll get a few minutes of fame on our homepage. That participation could be awesome or spammy. We'll see.

I'm really excited to see the analytics. I want to see if this new layout really does boost our newsletter signup and social media participation and everything. It will be super gratifying if it does.

Of course, we'll reiterate and revise based on all the analytics and feedback.

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged CSS* <http://labs.cooperhewitt.org/tag/css/>, *mobile* <http://labs.cooperhewitt.org/tag/mobile/>, *prototyping* <http://labs.cooperhewitt.org/tag/prototyping/>, *responsive web design* <http://labs.cooperhewitt.org/tag/responsive-web-design/>, *wireframing* <http://labs.cooperhewitt.org/tag/wireframing/> *on July 2, 2012* [<http://labs.cooperhewitt.org/2012/designing-responsive-footer/>] *by Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

Sealing a Facebook App in amber

One of the more painful things that happens from time to time is the decommissioning of a digital product. And in a museum this, of course, means trying to 'preserve' it.

But how do you 'preserve a Facebook App' built for an exhibition?

Cooper-Hewitt's record breaking [Set In Style exhibition](http://www.cooperhewitt.org/press/2011/04/08/set-style-jewelry-van-cleef-and-arpels) of 2011 included the creation of both an iOS App and a Facebook App. The Set In Style Facebook App allowed users to add jewellery from the exhibition to their Facebook photos and share them on their wall and the walls of their friends.

A couple of months ago Facebook changed their security settings for Apps (again) and we were faced with a decision – turn it off, or pay to have the code rewritten to support the security changes. With the exhibition ended we opted to close the App down, but before we did so we decided to make a quick video of it in operation with a 'real Facebook account' so that the 'social side' of the App could be captured in a way that still screen grabs would not.

Here's the video.

Some questions still remain.

Where does the 'record' for this 'object' now live? What 'metadata' needs to be associated with the 'record'? What happens to the source code? Should it be released? If it was released, is the App so heavily reliant upon the infrastructure and sociality of Facebook itself that it would be useless?

(Our newest member of the Lab's 'Armory of Nerds', Aaron Cope, has been thinking about these [very same issues](http://www.museumsandtheweb.com/mw2012/papers/archiving_flickr_and_other_websites_of_interest) in regard to 'preserving Flickr' with his project [Parallel-Flickr](http://straup.github.com/parallel-flickr/))

We're interested in these sorts of questions at a meta-institutional level too, as, being 'the National Design Museum' we are inevitably going to have to be collecting 'objects' that face similar issues soon enough. Indeed, should a design museum be 'collecting' the designs of Face-

book itself over the years? And how?

This entry was posted in Meta Issues <http://labs.cooperhewitt.org/category/meta-issues/> *and tagged*
meta <http://labs.cooperhewitt.org/tag/meta/>, *preservation* <http://labs.cooperhewitt.org/tag/preservation/> *on August 29,*
2012 [<http://labs.cooperhewitt.org/2012/sealing-facebook-app-amber/>] *by Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

Webcasting on the go

As we travel around the city doing panels and talks everywhere from [Governors](#)

[Island](#) <http://www.youtube.com/watch?v=kieJSaQdmbI&feature=plcp> to the [United Nations](#) <http://www.youtube.com/watch?v=WqRcHV3dFA8>

to our [Design Center in Harlem](#) <http://www.cooperhewitt.org/learning/designcenter>, we're always webcasting. Lots of people have looked at our setup by now and have approached us with questions– what's our equipment of choice? How do we make it all portable? What services do we use? What's that funny plug thing?

Here's our secret recipe:

YouTube Live Service <http://www.youtube.com/live> (you need to be a YouTube Partner for this). **Us-**

tream <http://www.ustream.tv/> is an alternative service if you can't get partnership status, we used to use Ustream before we were invited to be guinea pigs in the very awesome YouTube Live Beta Launch last year.

YouTube

Info and Settings Stream Settings Live Control Room View on Channel Event Manager

The Live Control Room is currently in beta. [Learn more](#)

Bill's Design Talks: Walter Hood Download Report

01:15:34 Broadcast Alert: None

Stream Summary

Good stream health

There are currently no viewers for this video.

Average Live View Duration 00:31:35

Total View Time (Hours) 3

Peak Concurrent 4

360p Stream

<http://3ug4ii3uortgp68ee31cybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/08/Screen-shot-2012-08-31-at-3.13.10-PM.png>

YouTube live is new & awesome

which pulls streaming data from us...

WireCast for YouTube <http://blogs.telestream.net/wirecast/2012/04/11/wirecast-for-youtube-is-here/> (free software if you have YouTube Live) Regular **Wirecast** <http://www.telestream.net/wirecast/overview.htm> software is a paid alternative if you can't get YouTube partner status.

installed on a...

Macbook Air with Thunderbolt <http://www.apple.com/thunderbolt/> port

plugged in to a...

Thunderbolt male to male cable

plugged in to a...

BlackMagic intensity shuttle with Thunderbolt https://www.google.com/search?q=blackmagic+intensity+shuttle&sugexp=chrome,mod=4&sourceid=chrome&ie=UTF-8&safe=active#q=blackmagic+intensity+shuttle+thunderbolt&hl=en&safe=active&prmd=imvns&source=univ&tbm=shop&tbo=u&sa=X&ei=cv5AULjJBrsM6QHNwIGYCG&sqi=2&ved=0CCwQsxxg&bav=on.2,or.r_gc.r_pw.r_cp.r_qf.&fp=b027e5d180a15bb8&biw=1544&bih=946

plugged in to a...

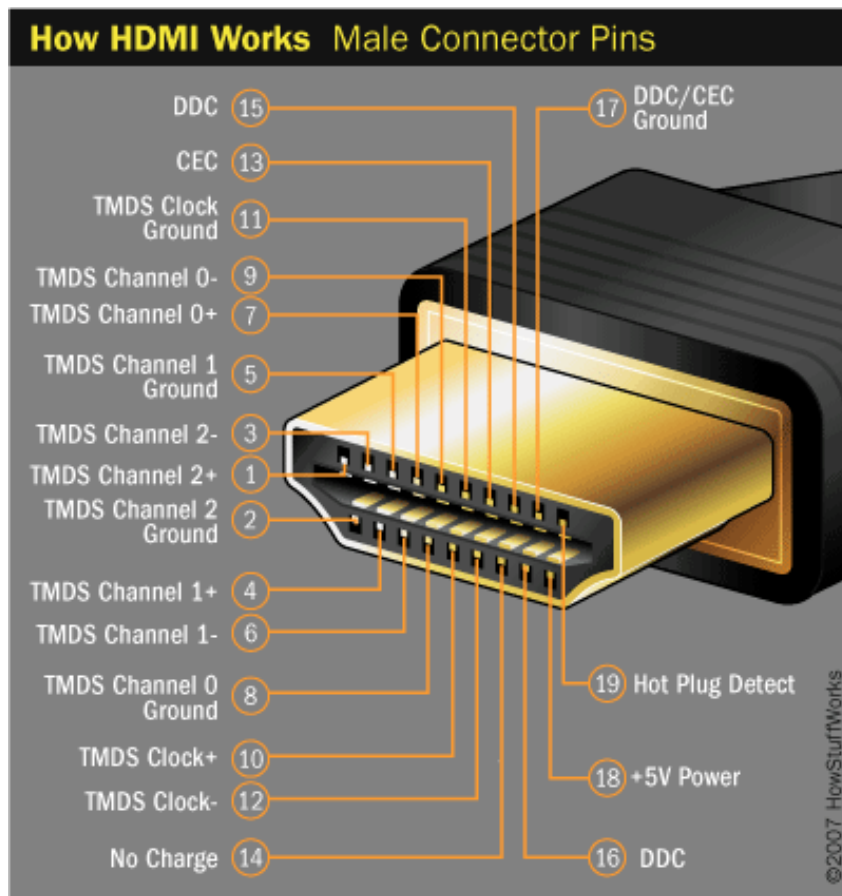
HDMI male to male cable

plugged in to a...

Canon XF105 camera https://www.google.com/search?q=canon+xf105&sugexp=chrome,mod=4&sourceid=chrome&ie=UTF-8&safe=active#q=canon+xf105&hl=en&safe=active&prmd=imvns&source=lnms&tbm=shop&sa=X&ei=s_1AUNuFMsL6wGs3YH-wDQ&ved=0CA4Q_AUoBQ&bav=on.2,or.r_gc.r_pw.r_cp.r_qf.&fp=b027e5d180a15bb8&biw=1544&bih=946 with HDMI-out port

which is receiving audio from...

An XLR cable which carries the audio from any number of stick mics fed into our mixing board & XLR splitter. If we're in an auditorium venue we ask for an XLR feed from the AV people there.



<http://3ug4ii3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/08/hdmi-connector-diagram.gif>

HDMI is awesome (image via howstuffworks.com)

Notes:

The HDMI cable carries both audio AND video from the camera into the laptop. **SWEET.**

Wi-fi works fine, unbelievably. But a hard wired connection is always best for streaming if you can get it.

Sometimes if your audio and video sources are separate from each other, the webcast will appear out of sync. Sending A and V together through one camera is good for sync.

We tried playing with multi-cam a few times (on a mac pro tower, wouldn't dare that with a

laptop graphics card) This usually choked the graphics card, and gave us sync issues. So we stick to single-cam.

Sometimes we run our own camera and our own mixing board with microphones, and sometimes we're in a venue where microphones are done by the house staff, and we just ask them for an XLR feed which we plug into our camera.

The UN and WNYC Greene Space house staff ran their own camera and audio, AND they had their own streaming encoder. In this scenario we give them the **RTMP** and **Stream Name** codes (stored in the YouTube event settings) from our YouTube account. They plugged these codes into their encoder software—making a direct link between the venue's audio and video feeds and our YouTube account. In these cases, our only job is to check that the A and V signals are coming through to the net OK, and then clicking "Start Broadcast" on YouTube in a web browser. Then after the program is done I click "Stop Broadcast."

Every venue will have different hardware and software going on, so this setup can take some major fiddling with settings before you get it to work. Generally this fiddling has to happen with the venue's encoder software, because the YouTube settings stay pretty static. The UN's encoder was robust enough that they could push the stream to their usual flash player on the UN web site and our YouTube account simultaneously.

Here's <http://blogs.walkerart.org/newmedia/2012/05/07/event-documentation-and-webcasting-for-museums/> what the media team at the [Walker Art Center](http://www.walkerart.org/) <http://www.walkerart.org/> has to say about webcasting. We'll move to a setup more like theirs once our main Museum renovation is done, and we have a permanent home for programming. For now, we're webcasting in a way that's light, modular and mobile.

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *on August 31, 2012* [<http://labs.cooperhewitt.org/2012/webcasting/>] *by katieshelly* <http://labs.cooperhewitt.org/author/katieshelly/>.

On cleaning our collection data with interactive data transformation tools

Seth van Hooland, Ruben Verborgh, and Rik Van de Walle's [Free Your Metadata](http://freeyourmetadata.org) <http://freeyourmetadata.org> group have been hard at work looking at the [dataset](http://www.cooperhewitt.org/collections/data) <http://www.cooperhewitt.org/collections/data> from Cooper-Hewitt.

The first in a number of articles in various publications on their work with our collection has been published.

It provides a good introductory piece to their work using Google Refine and the way in which other institutions with 'messy data' can now use 'interactive data transformation tools' to clean it up in ways that were previously extremely time consuming.

Linked Data hold the promise to derive additional value from existing data throughout different sectors, but practitioners currently lack a straightforward methodology and the tools to experiment with Linked Data. this article gives a pragmatic overview of how general purpose Interactive Data transformation tools (IDTs) can be used to perform the two essential steps to bring data into the Linked Data cloud: data cleaning and reconciliation. these steps are explained with the help of freely available data (Cooper-hewitt National Design museum, New York) and tools (google refine), making the process repeatable and understandable for practitioners.

Read online: ([free PDF](http://www.niso.org/publications/isq/2012/v24no2-3/vanhooland/) <http://www.niso.org/publications/isq/2012/v24no2-3/vanhooland/>)

Van Hooland, Seth, Ruben Verborgh, and Rik Van de Walle. [Joining the Linked Data Cloud in a Cost-Effective Manner](http://www.niso.org/publications/isq/2012/v24no2-3/vanhooland/) <http://www.niso.org/publications/isq/2012/v24no2-3/vanhooland/> . Information Standards Quarterly, 2012 Spring/Summer, 24(2/3):24-28.

This entry was posted in [Collection data](http://labs.cooperhewitt.org/category/collection-data/) <http://labs.cooperhewitt.org/category/collection-data/> and tagged [google refine](http://labs.cooperhewitt.org/tag/google-refine/) <http://labs.cooperhewitt.org/tag/google-refine/>, [linked data](http://labs.cooperhewitt.org/tag/linked-data/) <http://labs.cooperhewitt.org/tag/linked-data/>, [metadata](http://labs.cooperhewitt.org/tag/metadata/) <http://labs.cooperhewitt.org/tag/metadata/> on September 17, 2012 [<http://labs.cooperhewitt.org/2012/clean->

ing-collection-data/] *by Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

iPads and tech in schools update

Since our [last post](http://labs.cooperhewitt.org/2012/deploying-ipads-nyc-schools/), NYC public school teachers participating in the [Arts Achieve pilot](http://data.ed.gov/grants/investing-in-innovation/applicant/15523) have had 3 months to start working with their new projectors, iPads, styli, microphones, and other tech stuff.

Here's a glimpse into the tech training sessions we did with teachers last March, in close collaboration with my colleague in the education department, Marianna Siciliano.

Our teachers have now had the summer to process the training and in-classroom experience, and share feedback with us about the ups and downs.

Overview of Technology Introduced to Date

Ning Network:

Debuted in July 2011

2,377 visits to date

Technology Bundles Distributed in Feb/March 2012

3 iPads per classroom

1 Mini Projector

Microphones for Music and Theater

Styli for Visual Arts

Flexible iPad stands for Dance

<http://3ug4ii3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/09/tech-packages.jpg>

Here's what we gave out to teachers.

What have we learned since putting tech in teachers' hands?

1. Camera, camera, camera.

The iPad camera is by far the most popular and widely-used feature of any products we gave to teachers. Video and stills are pouring out of the classrooms. They're handy for more than sharing outward; often the camera is being used as a way to "take notes" or play back video for review locally.

2. When it comes to projectors, quality trumps portability.

We thought the portability factor would be great for teachers who do "art on a cart," however the pico projectors we provided did not go over as well as we'd hoped. This might be because these guys are in the arts, so strong image quality is important to them. Also, more and more classrooms in NYC are being outfitted with high-res, high-brightness Smar



<http://3ug4ii3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/09/Tech-Support-steps.jpg>

This is the tech support printout we gave our teachers

tboards, so it looks like pico projectors, with their dim lamps and small images, are not an exciting addition to most classrooms. Additionally, the pico projectors were confusing for the few teachers in the project already fluent with Smartboards.

With teachers, any existing familiarity is priceless, because you can spend precious training hours on other topics.

3. People like DropBox and iMovie.

It's a really good idea to use services and brand names that are already familiar to people. It lowers the intimidation factor and opens the possibility of finding easy, instant tech support from family, students, colleagues, or Google search. DropBox and iMovie had a level of instant familiarity and both are being used.

3 Months of Tech: Impact

148 Videos created & shared by **29** Specialists and **6** Facilitators

552 Photos shared by **17** Specialists and **8** Facilitators

64% of Specialists surveyed use new iPads in class every day.

100% of Specialists surveyed say new tech skills
will make a lasting impact on their teaching practice.

<http://3ug4ii3uortgp68ee3lcybxjyz.wpengine.netdna-cdn.com/wp-content/uploads/2012/09/ArtsAchieveNumbers.jpg>

Ning Network activity and survey data after three months of tech in the classroom.

4. Play is the way!

In our trainings and tipsheets, we outlined a bunch of best practices. Some teacher frustration has arisen from the feeling that these outlines were the only way to operate. We should have emphasized even more that it is OK to play, poke, experiment, test, and try stuff. This is definitely the best way to learn "tech stuff" (it's why kids are so good) and It's really hard to get this ethos across to adults!

Some teachers have also reported to us that they have had great success when they simply asked their students for help with their tech questions. We like to see teaching flow both ways!

5. AirWatch was unnecessary.

We killed our subscription to AirWatch mobile device management. I found the product limited; it didn't do anything useful for us. In the dream scenario, we could keep all the iPads uniform, add apps and manage media remotely, make changes on the device without user consent (which is hard to get when some users need instructions outlining *how* to consent), and troubleshoot remotely. None of this was actually possible with AirWatch. When any given iPad gets too far adrift from the original image with crazy apps and settings, we simply [re-image it from iCloud](#). <http://support.apple.com/kb/HT4859> This works very well, and quickly, and it's free!

This entry was posted in Education <http://labs.cooperhewitt.org/category/education/>, *Tablets* <http://labs.cooperhewitt.org/category/tablets/> *and tagged education* <http://labs.cooperhewitt.org/tag/edu/>, *evaluation* <http://labs.cooperhewitt.org/tag/evaluation/>, *ipads* <http://labs.cooperhewitt.org/tag/ipads/>, *teachers* <http://labs.cooperhewitt.org/tag/teachers/> *on September 26, 2012* [<http://labs.cooperhewitt.org/2012/tech-schools-update/>] *by katieshelly* <http://labs.cooperhewitt.org/author/katieshelly/>.

First look at our new online collection (public alpha)

"Perfect is the enemy of good" (Voltaire).

An early alpha version of our new [collection online](http://collection.cooperhewitt.org) is now live.

I say 'alpha version' because all this version is trying to do is replace the previous standard eMuseum collection viewer that used to be on the website. I also say 'alpha' because it is full of 'known issues' both in design and content. I say 'alpha' a *third* time because before you know it, there will be a beta which will introduce new features and fix some of the most glaring problems.

But a public alpha release is important.

In a sector that is allergic to the idea of a [minimum viable product](http://en.wikipedia.org/wiki/Minimum_viable_product), a public alpha makes a lot of sense. It especially makes sense for a 'design' museum that preaches/teaches the 'design process'. Early testing with *real users* will help us select which features to prioritise, and also which of our existing issues matter most. And we'll find that the users we expected probably won't be the only ones who come and visit.

Admittedly our museum is a little different.

On the back of two, [far too short](http://www.cooperhewitt.org/remembering-bill/life-work) years of transformation under the leadership of designer Bill Moggridge, we are in a position that many other institutions are not. We are trying to be more agile with our processes, more experimental with our products, and more promiscuous with our content.

We don't have the choice not to be.

The world of design is changing – and that is the world we are documenting, collecting and ruminating about as an institution. And it is not just the world of design, but the world itself.

We need to not just be 'on the web' but we need to be 'of the web'. And this is most im-

portant for our collection.

So what's in the alpha release?

- access to just over 123,000 objects
- navigation by various metadata elements
- persistent URLs for everything including people
- people 'concordances' with the holdings of other institutions and online sources!
- decades!
- [random object mode](http://collection.cooperhewitt.org/objects/random/) <http://collection.cooperhewitt.org/objects/random/> !

Aaron Cope and Micah Walter will each be exploring these in much more detail in their own blog posts over the next week. Aaron's also released some new bits and pieces related to our collection on our [GitHub repository](https://github.com/cooperhewitt) <https://github.com/cooperhewitt> .

But right now, go and [have an explore](http://collection.cooperhewitt.org) <http://collection.cooperhewitt.org> .



[countries](#) [departments](#) [exhibitions](#) [people](#) [periods](#) [random](#) [roles](#) [types](#) [this is a public alpha](#)

Advertisement for Hudson Clothier



This object is resting in our storage facility. We acquired this object in 1962



please don't steal our pictures, yeah?

Who's on first

Object ID: [18442557](#)

Accession Number: [1962-149-8-t](#)

Tombstone: Advertisement for Hudson Clothier, ca. 1880. Chromolithograph. Gift of Carol MacDonald. 1962-149-8-t.

Period: [Victorian](#)

Sleepy Resting Person courtesy [James Stone](#) ([The Noun Project](#))

An arabian man standing with a long stick in front of a diamond shaped view of the desert and pyramids

This [trade card](#) is chromolithograph. Its dimensions are: Approximately: 15 x 10 cm (5 7/8 x 3 15/16 in.).

This [trade card](#) is dated ca. 1880.

Gift of Carol MacDonald. Its provenance is [Gift of Carol MacDonald \(Gift\)](#) We acquired this object in 1962.

See more stuff from the [Drawings, Prints, and Graphic Design](#) department.

Do you have your own photos of this object? Are they online somewhere, like [Flickr](#) or [Instagram](#)? Or have you created a 3D model of one of our objects in [SketchUp](#) or [Thingiverse](#)? If so then then tag them with

ch:object=18442557 and we will connect ours to yours!

If you would like to tell us more about an object or have found an error in an object record, please [send us an email](#). Be sure to include the Object ID as well as the Accession Number for the object. Objects that are slated to be on display when the museum re-opens in 2014 are being given priority but all corrections are welcomed!

<http://collection.cooperhewitt.org>

Sample object record.

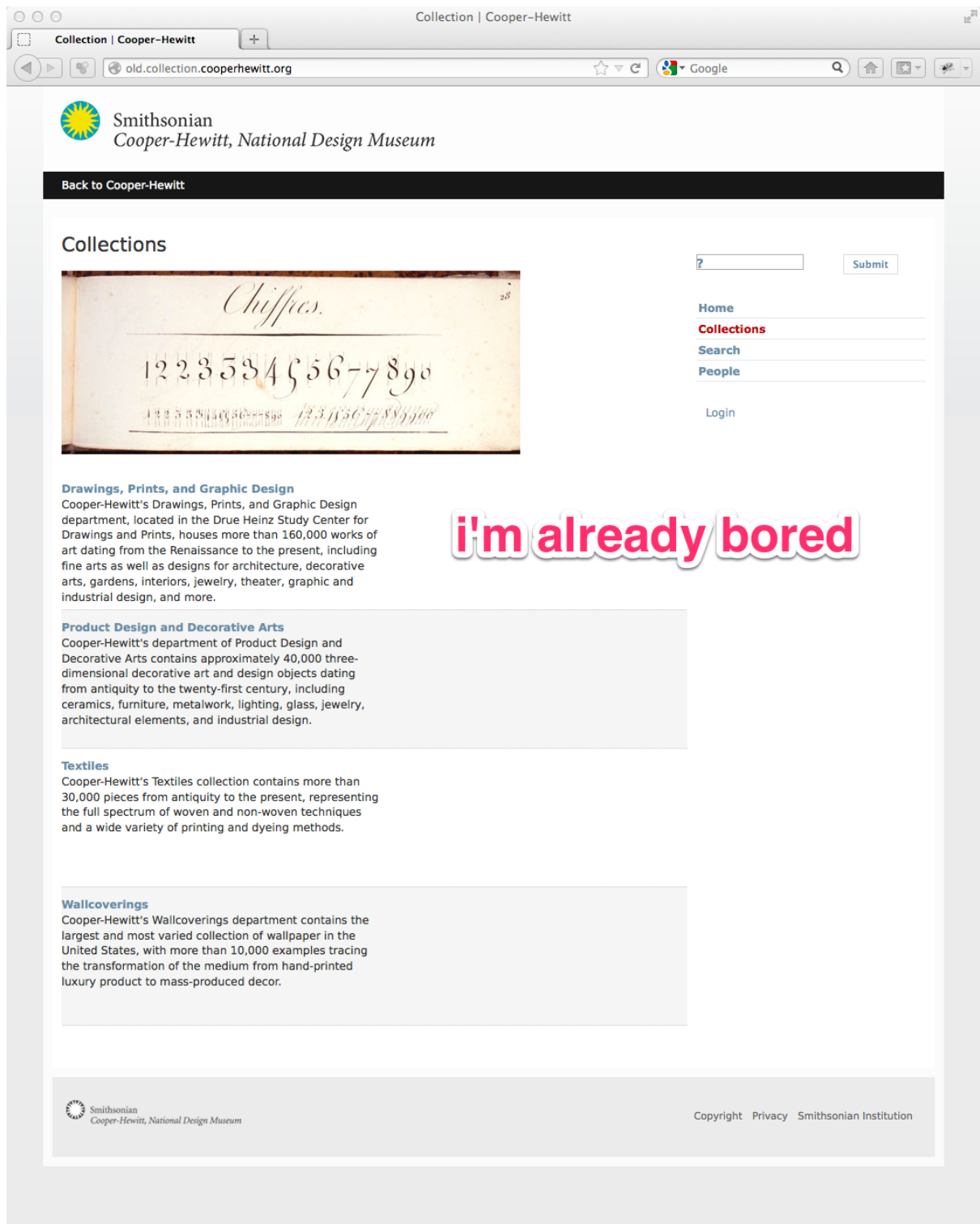
This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/>, *Collection data* <http://labs.cooperhewitt.org/category/collection-data/> *and tagged alpha* <http://labs.cooperhewitt.org/tag/alpha/>, *catalogue* <http://labs.cooperhewitt.org/tag/catalogue/>, *metadata* <http://labs.cooperhewitt.org/tag/metadata/> *on September 26, 2012* [<http://labs.cooperhewitt.org/2012/online-collection-alpha/>] *by Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

Getting lost in the collection (alpha)

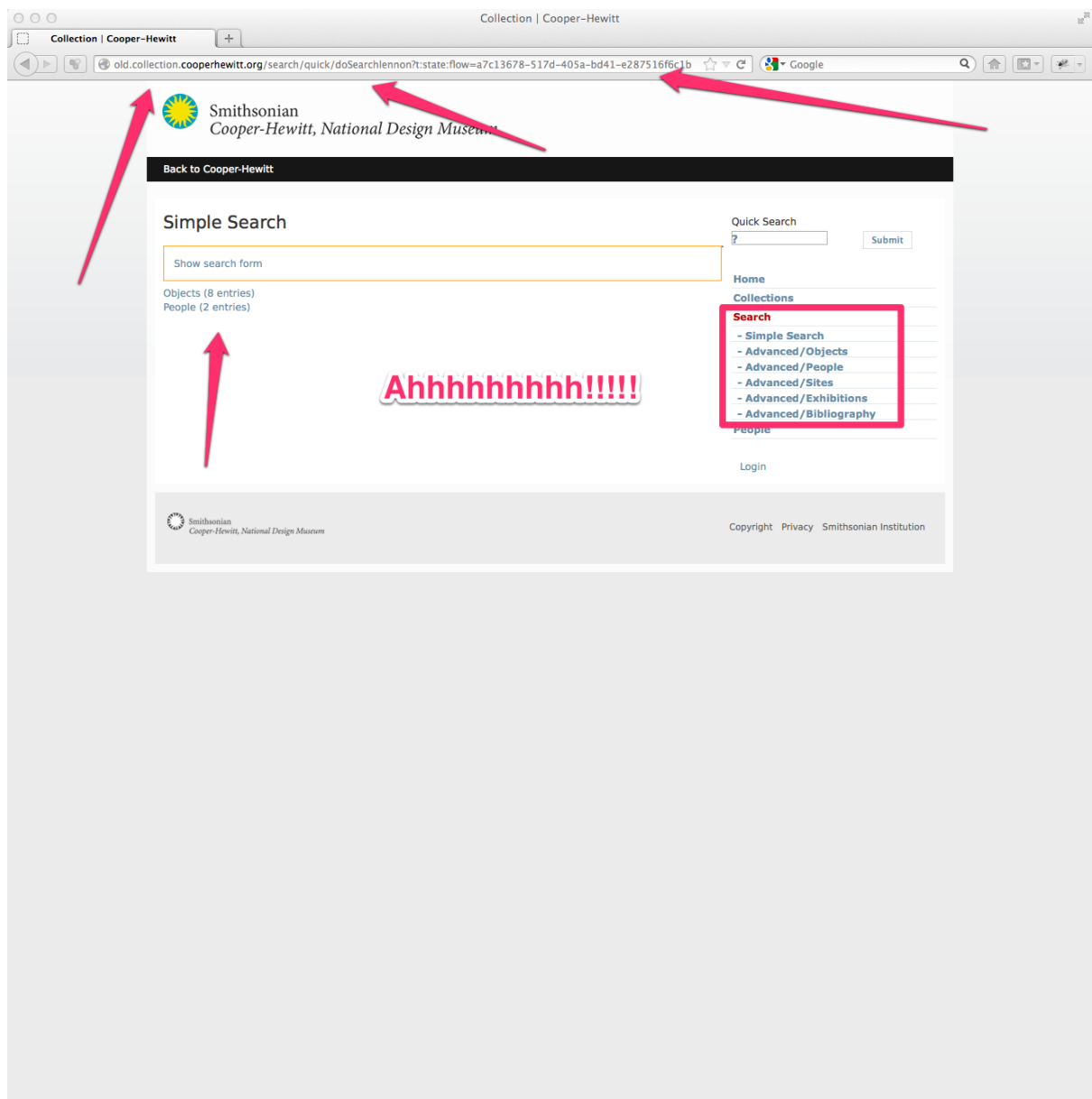
Last week marked a pretty significant moment in my career here at Cooper-Hewitt.

As I'm sure most of you already know, we [launched](http://labs.cooperhewitt.org/2012/online-collection-alpha/) our Alpha collections website. The irony of this being an “alpha” of course is that it is by leaps and bounds better than our previous offering built on eMuseum.

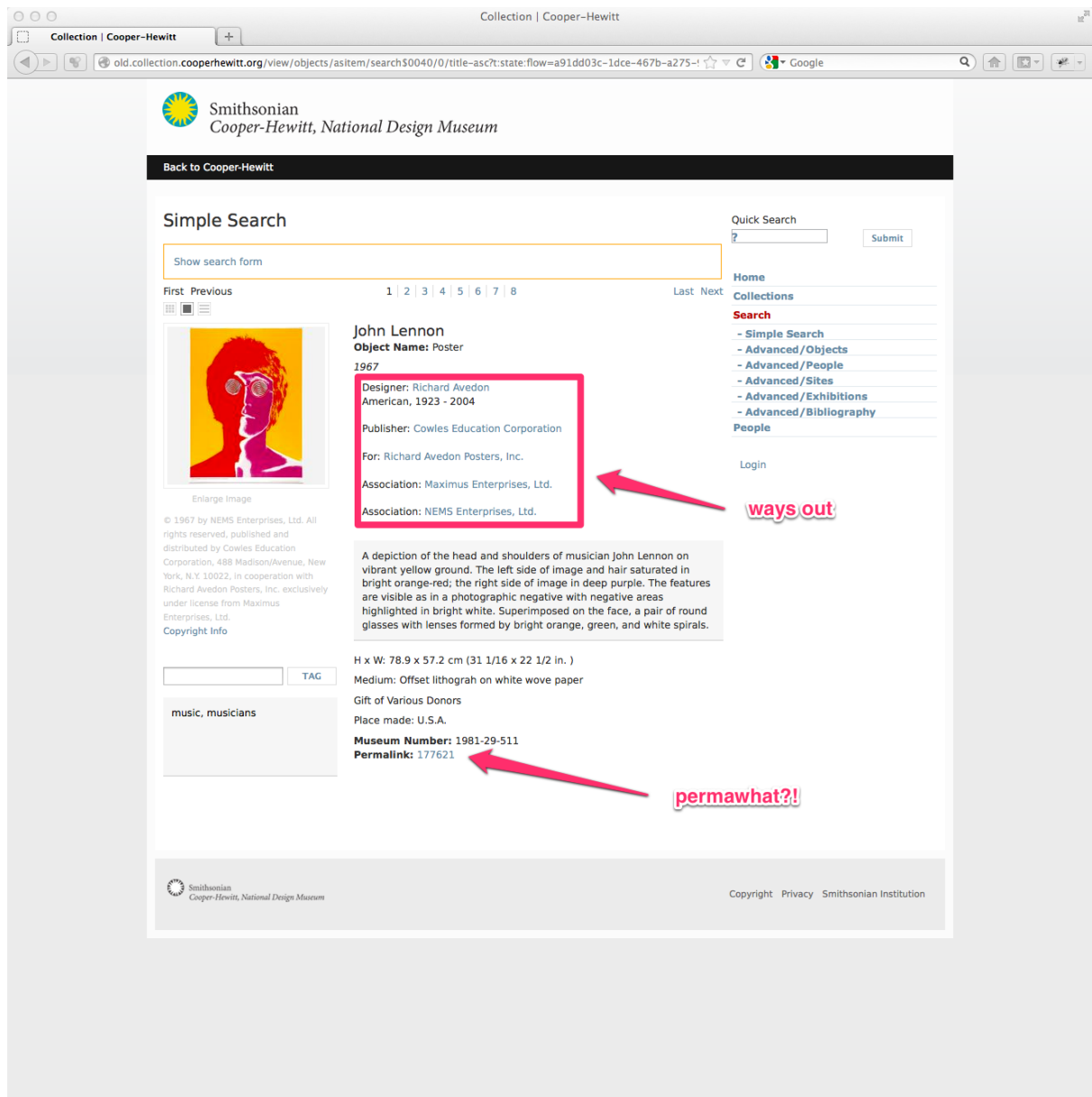
If you notice in the screengrab below, eMuseum was pretty bland. The homepage, which is [still available](http://old.collection.cooperhewitt.org) allowed you to engage by selecting from one of 4 museum oriented departments. You could also search. Right...



Upon entering the site, either via search or through browsing one of the four departments several things were in my mind huge problems.



Above is a search for “lennon” and you get the idea. Note the crazy long URLs with all kinds of session specific data. This was for years a huge issue as people would typically copy and paste that URL to use in blog posts and tweets. Trying to come back to the same URL twice never worked, so at some point we added a little “permalink” link at the bottom, but users rarely found it. You’ll also note the six search options under the menu item “Search.” OK, it’s just confusing.

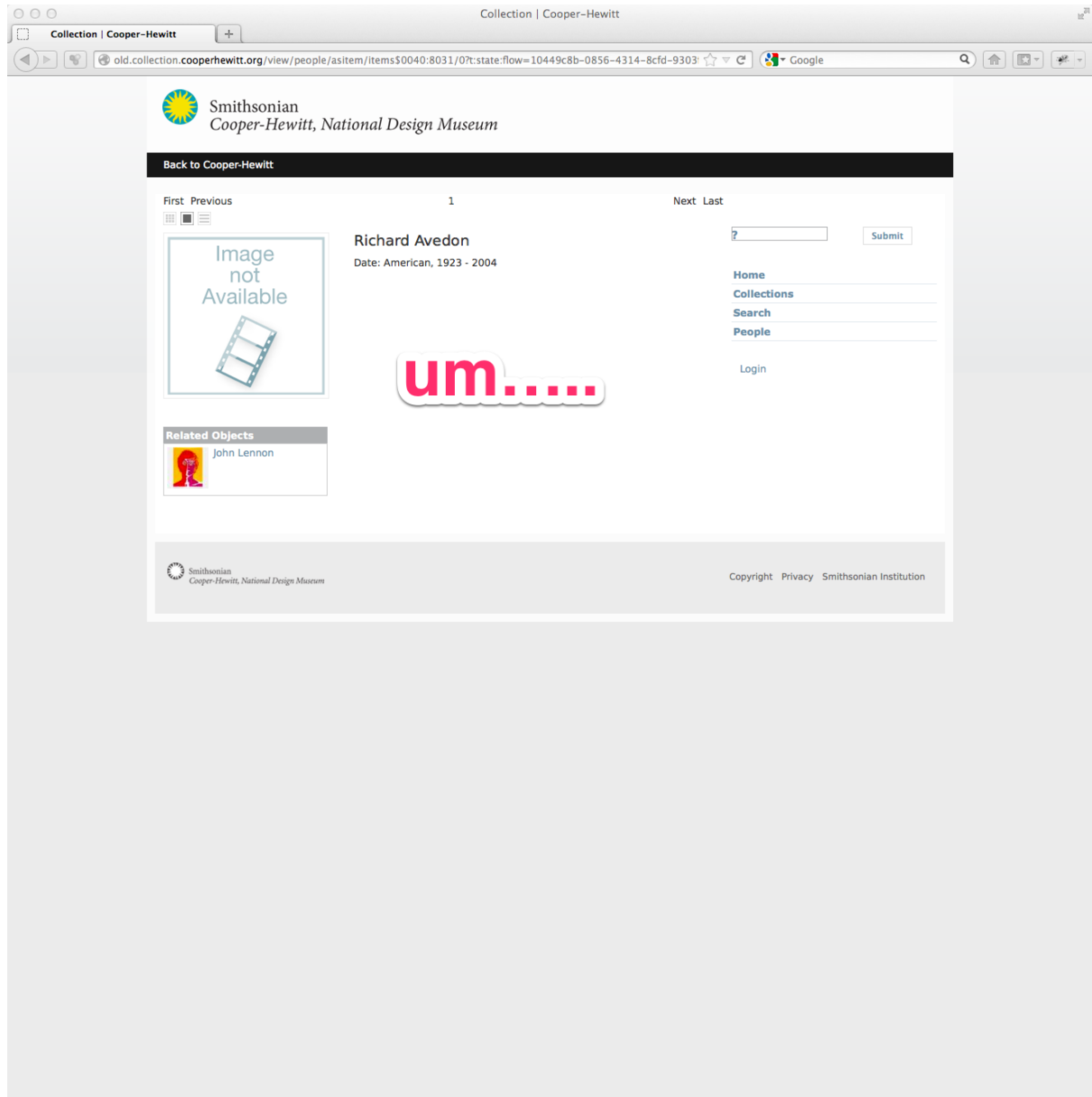


Finally landing on an object page and you have the object data, but where does it all lead you to?

For me the key to a great, deep, user experience is to allow users to get lost within the site. It sounds odd at first. I mean if you are spending your precious time doing research on our site, you wouldn't really want to "get lost" but in practice, it's how we make connections, discover the oddities we never knew existed, and actually allow ourselves to uncover our own original thought. Trust me, getting lost is essential. (And it is exactly what we know visitors enjoy doing inside exhibitions.)

As you can probably tell by now, getting lost on our old eMuseum was pretty tough to do. It was designed to do just the opposite. It was designed to help you find “an object.”

Here’s what happens when you try to leave the object page in the old site.



So we ditched all that. Yes, I said that right, we ditched eMuseum! To tell you the truth, this has been something I have been waiting to do since I started here over two years ago.

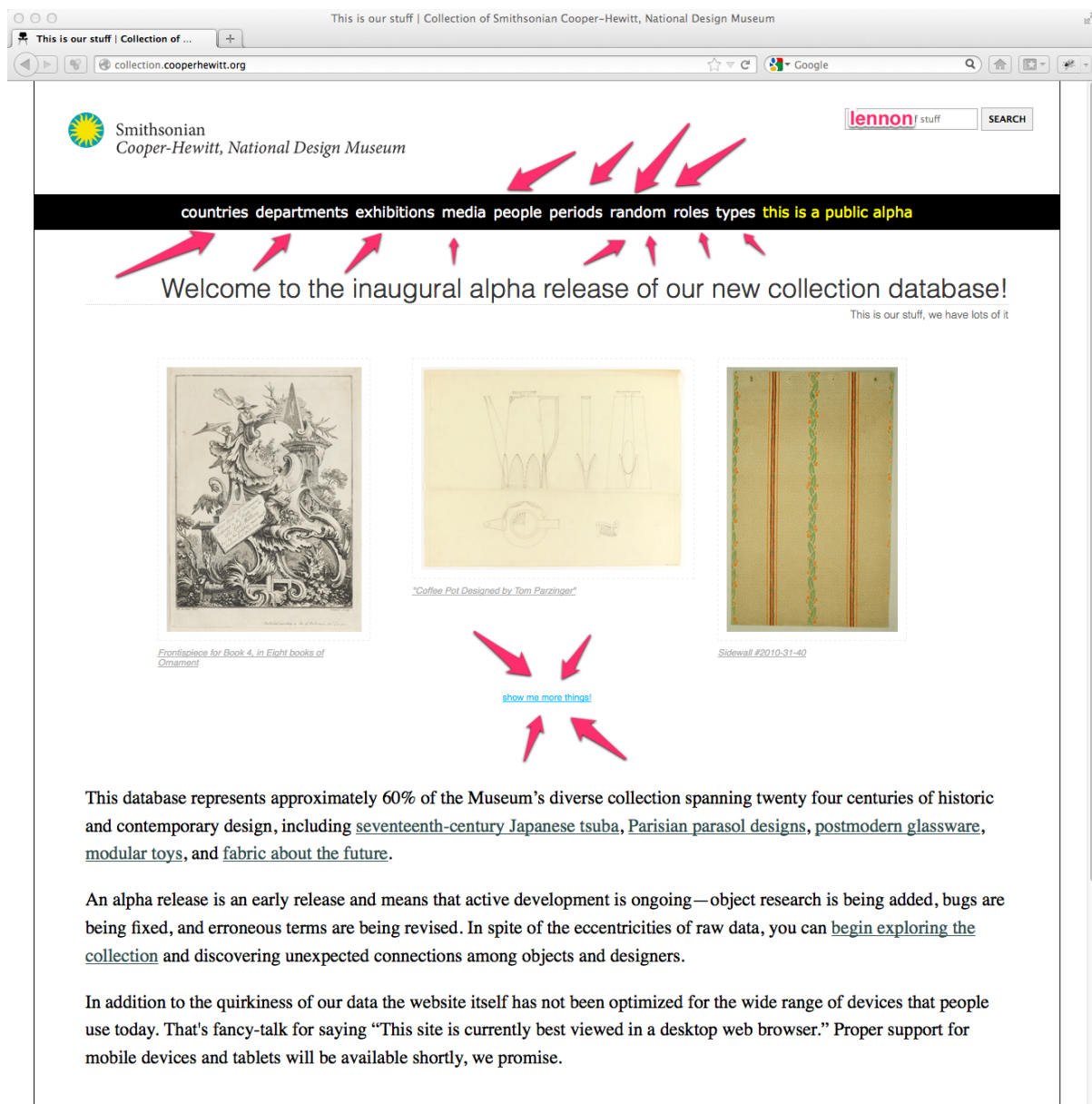
When I started here, we had about 1000 objects in eMuseum. Later we upped that to 10,000, and when Seb began (at the end of 2011) we quickly upped that number to about 123,000.

I really love doing things in orders of magnitude.

I noticed that adding more and more objects to eMuseum didn't really slow it down, it just made it really tough to browse and get lost. There was just too much stuff in one place. There were no other entry points aside from searching and clicking lists of the four departments.

Introducing <http://labs.cooperhewitt.org/2012/online-collection-alpha/> our new collections website.

We decided to start from scratch, pulling data from our existing TMS database. This is the same data we were exporting to eMuseum, and the [same data we released](http://labs.cooperhewitt.org/2012/releasing-collection-github/) <http://labs.cooperhewitt.org/2012/releasing-collection-github/> as CC0 on GitHub back in February. The difference would be, presenting the data in new ways.



Note the many menu options. These will change over time, but immediately you can browse the collection by some high level categories.

Note the random button—refreshing your browser displays three random objects from our collection. This is super-fun and to our surprise has been one of the most talked about features of the whole alpha release. We probably could have added a random button to eMuseum and called it a day, but we like to aim a little higher.

Search is still there, where it should be. So let's do a similar search for "lennon" and see what happens.

Here, I've skipped the search results page, but I will mention, there were a few more results. Our new object page for this same poster by Richard Avedon is located at the nice, friendly and persistent URL <http://collection.cooperhewitt.org/objects/18618175/> <http://collection.cooperhewitt.org/objects/18618175/> . It has its own unique ID (more on this in a post next week by Aaron) and I have to say, looks pretty simple. We have lots of other kinds of URLs with things in them like "people" , "places" and "periods." URLs are important, and we intend to ensure that these live on forever. So, go ahead and link away.



Smithsonian
Cooper-Hewitt, National Design Museum

We have lots of stuff

SEARCH

countries departments exhibitions media people periods random roles types **this is a public alpha**

Poster #1981-29-511

 This object is resting in our storage facility. We acquired this object in **1981**



JOHN LENNON photographed by Richard Avedon for Look Magazine

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please don't steal our pictures, yeah?

Who's on first

Object ID: [18618175](#)

Accession Number: [1981-29-511](#)

Tombstone: Poster #1981-29-511.
Richard Avedon . 1967. Offset lithograph on white wove paper. Gift of Various Donors. 1981-29-511.

Period: [Second half 20th Century](#)

It takes a village to raise an object. Here are [the people](#) who've been involved with this one

Designed by [Richard Avedon](#)

Published by [Cowles Education Corporation](#)

Made for [Richard Avedon Posters, Inc.](#)

Association: [Maximus Enterprises, Ltd.](#)



Map tiles by [Stamen Design](#) data by [Natural Earth](#) and [OpenStreetMap](#). Sleepy Resting Person courtesy [James Stone \(The Noun Project\)](#)

A depiction of the head and shoulders of musician John Lennon on vibrant yellow ground. The left side of image and hair saturated in bright orange-red; the right side of image in deep purple. The features are visible as in a photographic negative with negative areas highlighted in bright white. Superimposed on the face, a pair of round glasses with lenses formed by bright orange, green, and white spirals.

This poster is offset lithograph on white wove paper. Its dimensions are: H x W: 78.9 x 57.2 cm (31 1/16 x 22 1/2 in.).

It is inscribed "*Imprinted in green, lower left corner of margin: JOHN LENNON photographed by Richard Avedon for Look magazine; in lower right corner: Copyright c [encircled] 1967 by NEMS Enterprises, Ltd. All rights reserved, published and distributed by Cowles Education Corporation, 488 Madison Avenue, New York, N.Y. 10022, in cooperation with Richard Avedon Posters, Inc. exclusively under license from Maximus Enterprises, Ltd.*".

This poster is from United States and dated "1967".

Donors. This object came to our collection as a Gift, in 1981.

This object has been included in the following exhibitions:

- Treasures from the Collection, October 14, 2003 - May 2, 2004
- Ephemeral Images: Recent American Posters, January 29, 1981 - March 29, 1981

See more stuff from the Drawings, Prints, and Graphic Design department.

Do you have your own photos of this object? Are they online somewhere, like Flickr or Instagram? Or have you created a 3D model of one of our objects in SketchUp or Thingiverse? If so then then tag them with **ch:object=18618175** and we will connect ours to yours!

If you would like to tell us more about an object or have found an error in an object record, please send us an email. Be sure to include the Object ID as well as the Accession Number for the object. Objects that are slated to be on display when the museum re-opens in 2014 are being given priority but all corrections are welcomed!

The basic page layout is pretty similar to eMuseum, at first. You have essential vital stats in the gray box on the right. Object ID, Accession Number, Tombstone data, etc, etc. You also have a map, and some helpful hints.

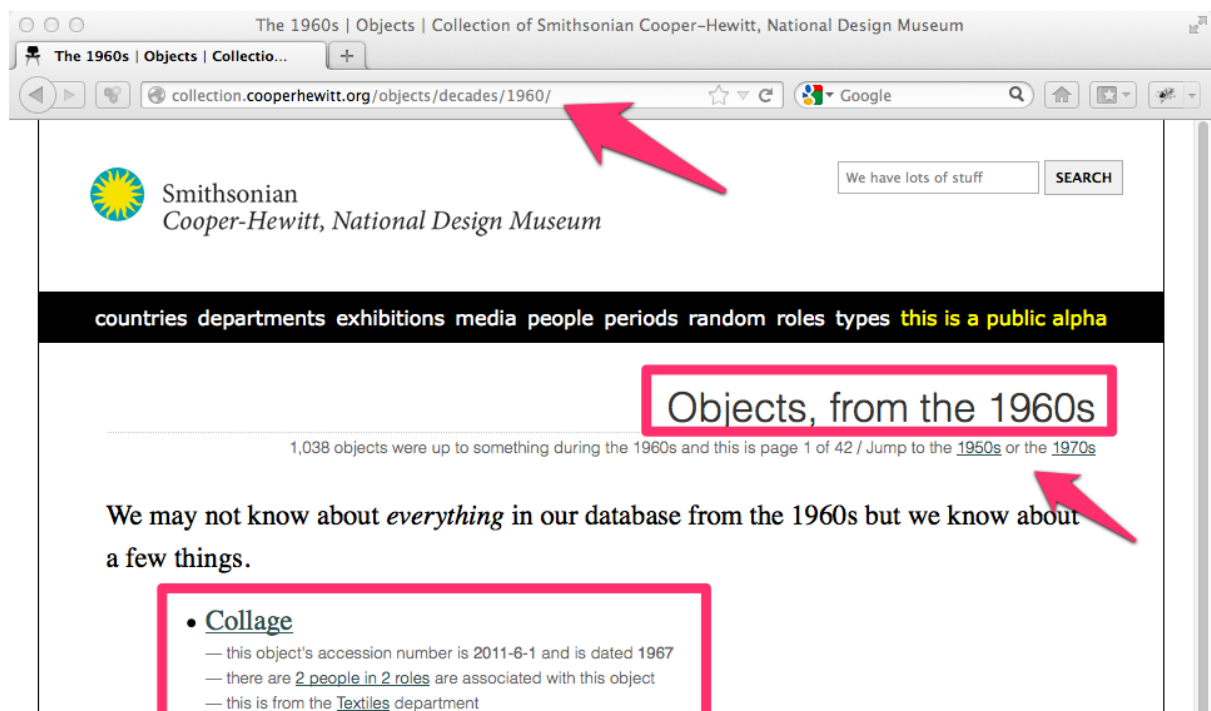
But then things get a little more exciting. We pull in loads of TMS data, crunch it and link it up to all sorts of things. Take a scroll down this page and you'll see lots of text, with lots of links and a few fun bits at the end, like our "machine tag" field.

Each object has been assigned a machine tag based on its unique ID number. This is simple and straightforward future-proofing. If you're on a site like [Flickr](http://flickr.com) <http://flickr.com> and you come across (or have your own) photo of the same object we have in our collection, you can add the machine tag.

Some day in the near future we will write code to pull in content tagged in this way from a variety of sources. This is where the collection site will really begin to take shape as well not only be displaying the "thing we have" but its relevance in the world.

It puts a whole new spin on the concept of "collecting" and it's something we are all very excited to see happen. So start tagging!

Moving on, I mentioned that you can get lost. This is nice.



— we have [one image](#) of this object

- **Lippen**

- this object's accession number is 2011-36-1 and is dated 1968
- there is [one person](#) is associated with this object
- this is from the [Textiles](#) department
- we have [2 images](#) of this object

- **Bangkok**

- this object's accession number is 2011-25-13 and is dated Introduced 1962
- there are [2 people in 2 roles](#) are associated with this object
- this is from the [Textiles](#) department
- we have [2 images](#) of this object

- **Rail**

- this object's accession number is 2011-25-1 and is dated introduced 1962
- there are [3 people in 3 roles](#) are associated with this object
- this is from the [Textiles](#) department
- we have [2 images](#) of this object

- **Design for a Dixie Cup: Fruits & Vegetables**

- this object's accession number is 2011-1-9 and is dated ca. 1970
- there is [one person](#) is associated with this object
- this is from the [Drawings, Prints, and Graphic Design](#) department

- **Design for a Dixie Cup**

- this object's accession number is 2011-1-8 and is dated ca. 1970
- there is [one person](#) is associated with this object
- this is from the [Drawings, Prints, and Graphic Design](#) department

- **Design for a Dixie Cup**

- this object's accession number is 2011-1-7 and is dated ca. 1970
- there is [one person](#) is associated with this object
- this is from the [Drawings, Prints, and Graphic Design](#) department

- **Prototype of an 8 Ounce Dixie Cup**


- this object's accession number is 2011-1-6 and is dated ca. 1970
- there are [2 people in 2 roles](#) are associated with this object
- this is from the [Drawings, Prints, and Graphic Design](#) department
- we have [one image](#) of this object

- **Le Nouveau Monde de la Medecine**

From the Avedon poster page I clicked on the decade called 1960's This brings me to a place where I can browse based on the decade. You can jump ahead in time and easily get lost. It's so interesting to connect the object you are currently looking at to others from the same time period. You immediately get the sense that design happens all over the world in a wide variety of ways. It's pretty addictive.

Navigating to the "person" page for [Richard Avedon](http://collection.cooperhewitt.org/people/18535489/), we begin to see how these connections can extend beyond our own institutional research. We begin by pointing out what kinds of things we have by Avedon. This is pretty straight-forward, but in the gray box on the right you can see we have also linked up Avedon's person record in our own TMS database with a wide variety of external datasets. For Avedon we have concordances with Freebase, MoMA, the V & A, and of course Wikipedia. In fact, [we are pulling](http://blog.us.glamwiki.org/2012/10/cooperhewitt/) in Wikipedia text directly to the page.

In future releases we will connect with more and more on the web. I mean, thats the whole point of the web, right? If you want to help us make these connections (we cant do everything in code) feel free to fork our [concordances repository on GitHub](https://github.com/cooperhewitt/concordances-repository) <https://github.com/cooperhewitt/concordances-repository> and submit a pull request.



Smithsonian
Cooper-Hewitt, National Design Museum

We have lots of stuff

countries departments exhibitions media people periods random roles types **this is a public alpha**

Richard Avedon

[American, 1923 - 2004](#)

We have [one object](#) that Richard Avedon was involved with somehow.

- [Designer](#), one object


Richard Avedon ([American, 1923 - 2004](#)) is from [United States](#).

Who's on first:

Person ID: [18535489](#)

This person is also known around town at:

[Freebase](#)
[MoMA](#)
[Victoria and Albert Museum](#)
[Wikipedia](#)



Map tiles by [Stamen Design](#), data by [Natural Earth](#) and [OpenStreetMap](#)

Wikipedia says:

Richard Avedon (May 15, 1923 – October 1, 2004) was an American photographer. An obituary published in *The New York Times* said that "his fashion and portrait photographs helped define America's image of style, beauty and culture for the last half-century."

Early life and education

Avedon was born in New York City to a Jewish Russian family. He was the only son of Jacob Israel Avedon, a Russian-Jewish immigrant who started a successful retail dress business on Fifth Avenue, and his wife Anna, who came from a family that owned a dress manufacturing business. He attended DeWitt Clinton High School in the Bronx, where he worked on the school paper *The Magpie* with James Baldwin from 1937 until 1940. After briefly attending Columbia University, he started as a photographer for the Merchant Marines in 1942, taking identification pictures of the crewmen with his Rolleiflex camera given to him by his father as a going-away present. From 1944 to 1950, he studied with Alexey Brodovitch at his Design Laboratory at the New School for Social Research.

Photography career

In 1944, Avedon began working as an advertising photographer for a department store, but was quickly discovered by Alexey Brodovitch, the art director for the fashion magazine *Harper's Bazaar*. Lillian Bassman also promoted Avedon's career at *Harper's*. In 1945 his photographs began appearing in *Junior Bazaar* and, a year later, in *Bazaar* itself.

In 1946, Avedon had set up his own studio and began providing images for magazines including *Vogue* and *Life*. He soon became the chief photographer for *Harper's Bazaar*. From 1950 he also contributed photographs to *Life*, *Look* and *Graphis* and in 1952 became Staff Editor and photographer for *Theatre Arts Magazine*. Avedon did not conform to the standard technique of taking fashion photographs, where models stood emotionless and seemingly indifferent to the camera. Instead, Avedon showed models full of emotion, smiling, laughing, and, many times, in action. Towards the end of the 1950s he became dissatisfied with daylight photography and open air locations and so turned to studio photography, using strobe lighting.

When Diana Vreeland left *Harper's Bazaar* for *Vogue* magazine in 1966, Avedon joined her as a staff photographer. He proceeded to become the lead photographer of *Vogue* and photographed most of the covers from 1973 until Anna Wintour became editor in chief in late 1988. Notable among his fashion advertisement photograph series are the recurring assignments for Gianni Versace, starting from the spring/summer campaign 1980. He also photographed the Calvin Klein Jeans campaign featuring a fifteen year old Brooke Shields, as well as directing her in the television commercials. Avedon first worked with Shields in 1974 for a Colgate toothpaste ad. He shot her for Versace, 12 American *Vogue* covers and Revlon's Most Unforgettable Women campaign. In the February 9, 1981 issue of *Newsweek*, Avedon said that "Brooke is a lightning rod. She focuses the inarticulate rage people feel about the decline in contemporary morality and destruction of innocence in the world." On working with Avedon, Shields told *Interview* magazine in May 1992 "When Dick walks into the room, a lot of people are intimidated. But when he works, he's so acutely creative, so sensitive. And he doesn't like it if anyone else is around or speaking. There is a mutual vulnerability, and a moment of fusion when he clicks the shutter. You either get it or you don't".

In addition to his continuing fashion work, by the 1960s Avedon had turned his energies toward making studio portraits of civil rights workers, politicians and cultural dissidents of various stripes in an America fissured by discord and violence. He began to branch out and photographed patients of mental hospitals, the Civil Rights Movement in 1963, protesters of the Vietnam War, and later the fall of the Berlin Wall. An exceedingly personal book called "Nothing Personal," with a text by his high school classmate James Baldwin appeared in 1964. During this period, Avedon also created two famous sets of portraits of The Beatles. The first, taken in mid to late 1967, became one of the first major rock poster series, and consisted of five striking psychedelic portraits of the group — four heavily solarized individual color portraits (solarisation of prints by his assistant, Gideon Lewin, retouching by Bob Bishop) and a black-and-white group portrait taken with a Rolleiflex camera and a normal Planar lens. The next year he photographed the much more restrained portraits that were included with *The Beatles* in 1968. Among the many other rock bands photographed by Avedon, in 1973 he shot Electric Light Orchestra with all the members exposing their bellybuttons for recording, *On the Third Day*.

Avedon was always interested in how portraiture captures the personality and soul of its

subject. As his reputation as a photographer became widely known, he brought in many famous faces to his studio and photographed them with a large-format 8x10 view camera. His subjects include Buster Keaton, Marian Anderson, Marilyn Monroe, Ezra Pound, Isak Dinesen, Dwight D. Eisenhower, Andy Warhol, and the Chicago Seven. His portraits are easily distinguished by their minimalist style, where the person is looking squarely in the camera, posed in front of a sheer white background. Avedon would at times evoke reactions from his portrait subjects by guiding them into uncomfortable areas of discussion or asking them psychologically probing questions. Through these means he would produce images revealing aspects of his subject's character and personality that were not typically captured by others.

He is also distinguished by his large prints, sometimes measuring over three feet in height. His large-format portrait work of drifters, miners, cowboys and others from the western United States became a best-selling book and traveling exhibit entitled *In the American West*, and is regarded as an important hallmark in 20th century portrait photography, and by some as Avedon's *magnum opus*. Commissioned by the Amon Carter Museum in Fort Worth, Texas, it was a six-year project Avedon embarked on in 1979, that produced 125 portraits of people in the American west who caught Avedon's eye. His mural groupings featured emblematic figures: Andy Warhol with the players and stars of The Factory; The Chicago Seven, political radicals charged with conspiracy to incite riot at the 1968 Democratic National Convention; the Beat poet Allen Ginsberg and his extended family; and the Mission Council, a group of military and government officials who governed the United States' participation in the Vietnam War.

Avedon was drawn to working people such as miners and oil field workers in their soiled work clothes, unemployed drifters, and teenagers growing up in the West circa 1979-84. When first published and exhibited, *In the American West* was criticized for showing what some considered to be a disparaging view of America. Avedon was also lauded for treating his subjects with the attention and dignity usually reserved for the politically powerful and celebrities. Laura Wilson served as Avedon's assistant during the creation of *In the American West* and in 2003 published a photo book documenting the experiences, *Avedon at Work, In the American West*.

In 1982 Avedon produced a playfully inventive series of advertisements for fashion label Christian Dior, based on the idea of film stills. Featuring a stock cast of models and actors, the color photographs purported to show scenes from the life of a fictional "Dior family," whose members managed to wear elegant fashions even when wrestling on a couch.

Avedon became the first staff photographer for *The New Yorker* in 1992, where his post-apocalyptic, wild fashion fable "In Memory of the Late Mr. and Mrs. Comfort," featuring model Nadja Auermann and a skeleton, was published in 1995. Other pictures for the magazine, ranging from the first publication, in 1994, of previously unpublished photos of Marilyn Monroe to a resonant rendering of Christopher Reeve in his wheelchair and nude photographs of Charlize Theron in 2004, were topics of wide discussion. Some of his less controversial *New Yorker* portraits include those of Saul Bellow, Hillary Rodham Clinton, Toni Morrison, Derek Walcott, John Kerry, and Stephen Sondheim. In his later years, he continued to contribute to *Egoïste*, where his photographs appeared from 1984 through 2000. In 1999, Avedon shot the cover photos for Japanese-American singer Hikaru Utada's *Addicted to You*.

He was awarded The Royal Photographic Society's Special 150th Anniversary Medal and

Honorary Fellowship (HonFRPS) in recognition of a sustained, significant contribution to the art of photography in 2003.

Exhibitions

Avedon had numerous museum exhibitions around the world. The Metropolitan Museum of Art, New York, presented two solo exhibitions during his lifetime, in 1978 and 2002. In 1980 another retrospective was organized by the University Art Museum in Berkeley. Major retrospectives were mounted at the Whitney Museum of American Art, New York (1994), and at the Louisiana Museum of Modern Art, Humblebaek, Denmark (2007; traveled to Milan, Paris, Berlin, Amsterdam and San Francisco, through 2009). Showing Avedon's work from his earliest, sun-splashed pictures in 1944 to portraits in 2000 that convey his fashion fatigue, the International Center of Photography in 2009 mounted the largest survey of the photographer's fashion work. Also in 2009, the Corcoran Gallery of Art showed "Richard Avedon: Portraits of Power", bringing together the photographer's political portraits for the first time.

Collections

Avedon's work is included in the collections of the Museum of Modern Art and Metropolitan Museum of Art, New York; Smithsonian's National Museum of American History, Washington, D.C.; Amon Carter Museum, Ft. Worth, Texas; and Centre Georges Pompidou, Paris, among many other museums and institutions worldwide.

Recognition

Avedon won many awards for his photography, including a Lifetime Achievement Award from the Council of Fashion Designers of America in 1989, the International Center of Photography Master of Photography Award in 1993, the Prix Nadar in 1994 for his photobook *Evidence*, the Royal Photographic Society 150th Anniversary Medal as well as the National Arts Award for Lifetime Achievement in 2003. He received honorary graduate degrees from the Royal College of Art (1989), Kenyon College (1993) and Parsons School of Design (1994), and was elected a Fellow of the American Academy of Arts and Sciences in 2001.

Art market

In 2010, a record price of £719,000 was achieved at Christie's for a unique seven foot high print of model Dovima, posing in a Christian Dior evening dress with elephants from the Cirque d'Hiver, Paris, in 1955. This particular print, the largest of this image, was made in 1978 for Avedon's fashion retrospective at the Metropolitan Museum of Art in New York, and was bought by Maison Christian Dior.

Gagosian Gallery announced its worldwide representation of Avedon in 2011.

Legacy

The **Richard Avedon Foundation** is private operating foundation, structured by Avedon during his lifetime. It began its work shortly after his death in 2004. Based in New York, the foundation is the repository for Avedon's photographs, negatives, publications, papers, and archival materials. In 2006, Avedon's personal collection was shown at the Pace/MacGill Gallery, New York, and at the Fraenkel Gallery, San Francisco, and later sold to benefit the Avedon Foundation. The collection included photographs by Martin Munkacsi, Edward Steichen, and Man Ray, among others. A slender volume, "Eye of the

Beholder: Photographs From the Collection of Richard Avedon" (Fraenkel Gallery), assembles the majority of the collection in a boxed set of five booklets: "Diane Arbus," "Peter Hujar", "Irving Penn", "The Countess de Castiglione" and "Etcetera," which includes 19th- and 20th-century photographers.

Personal life

In 1944, Avedon married Dorcas Marie Nowell (1925—2011); she became the model and actress Doe Avedon; they divorced after five years of marriage. In 1951, he married Evelyn Franklin; she died on March 13, 2004. Their marriage produced one son, John Avedon, an author and authority on Tibet.

In 1970, Avedon purchased a former carriage house on the Upper East Side that would serve as both his studio and his apartment. In the late 1970s, he purchased a four-bedroom house on a 7.5-acre estate in Montauk, nestled between the Atlantic Ocean and a nature preserve; in 1998, he put the place on the market for \$10 million and sold it for almost \$9 million in 2000.

On October 1, 2004, Avedon died of a brain hemorrhage in San Antonio, Texas, while shooting an assignment for *The New Yorker*. At the time of his death, he was also working on a new project titled *Democracy* to focus on the run-up to the 2004 U.S. presidential election.

Avedon is survived by his son John, and his four grandchildren William, Matthew, Michael and Caroline.

Funny Face

Hollywood presented a fictional account of his early career in the 1957 musical *Funny Face*, starring Fred Astaire as the fashion photographer "Dick Avery." Avedon supplied some of the still photographs used in the production, including its most famous single image: an intentionally overexposed close-up of Audrey Hepburn's face in which only her famous features - her eyes, her eyebrows, and her mouth - are visible.

Hepburn was Avedon's muse in the 1950s and 1960s, and he went so far as to say "I am, and forever will be, devastated by the gift of Audrey Hepburn before my camera. I cannot lift her to greater heights. She is already there. I can only record. I cannot interpret her. There is no going further than who she is. She has achieved in herself her ultimate portrait."

Famous photographs

- *Marella Agnelli, Italian socialite*, 1953
- *Carmen Mayrink Veiga, Brazilian socialite (Vogue's 10 best dressed)*, 1970
- *Dovima with Elephants*, 1955
- *Marilyn Monroe, actress*, 1957
- *Homage to Munkacsi, Carmen, coat by Cardin*, Paris 1957
- *Christina Bellin, model*, 1962
- *Dwight David Eisenhower, President of the United States*, 1964
- *The Beatles*, 1967
- *Andy Warhol and Members of the Factory*, New York 1969
- *Sly Stone (cover of Fresh Album)*, 1973
- *Asha Puthli (She Loves to Hear the Music Album back cover)*, 1974
- *Ronald Fischer, beekeeper*, 1981
- *Nastassia Kinski and the Sement* 1981

Photography from the 1950s to the 1980s

- *Pile of beautiful people*, Versace campaign 1982.

Books by Richard Avedon

- *Observations*, 1959. A collaborative book with Truman Capote containing portraits of many famous people of the twentieth century, including Pablo Picasso, J. Robert Oppenheimer, and Mae West.
- *Nothing Personal*, 1964. A collaborative book with James Baldwin.
- *Alice in Wonderland*, 1973, co-authored with Doon Arbus.
- *Portraits*, 1976
- *Portraits 1947-1977*, 1978
- *In the American West*, 1985
- *An Autobiography*, 1993. Contains 50 years of images arranged to tell Avedon's life story. Photos include celebrities such as Marilyn Monroe, Judy Garland, Andy Warhol, and Avedon's parents.
- *Evidence*, 1994. More than 600 images encompassing Avedon's fashion photographs, portraiture, journalistic shots, sketches, snapshots, and contact sheets. However, despite containing many images, the book focuses more on the essays and text about Avedon instead of being fully based on visuals.
- *The Sixties*, 1999, co-authored with Doon Arbus. Contains images of many famous figures such as Janis Joplin, Jimi Hendrix, and Twiggy.
- *Made in France*, 2001. A retrospective of Avedon's fashion portraiture from the 1950s. The book is expensive due to the images being printed on tritone plates.
- *Richard Avedon Portraits* 2002. 50 black and white images of celebrities and subjects from his *In The American West* project. Its release coincided with an exhibition of the work at the Metropolitan Museum of Art.
- *Woman in the Mirror*. 2005, with an essay by Anne Hollander.
- *Performance*. 2008, with an essay by John Lahr.
- *Portraits of Power*. 2008, edited by Paul Roth with an essay by Renata Adler. Coincides with an exhibition of political work at the Corcoran Gallery of Art in Washington DC.

References

External links

- Official website
- Richard Avedon at *Encyclopædia Britannica*
- Richard Avedon at the Museum of Modern Art
- Richard Avedon at *Find a Grave*
- Richard Avedon: Portrait Series of Jacob Israel Avedon from the Collection of The Jewish Museum (New York)

This entry has been automatically sourced from Wikipedia, the user-contributed encyclopedia. It may not have been reviewed by professional editors and is licensed under CC-BY-SA. Visit "Richard Avedon" on Wikipedia to correct or update this entry.

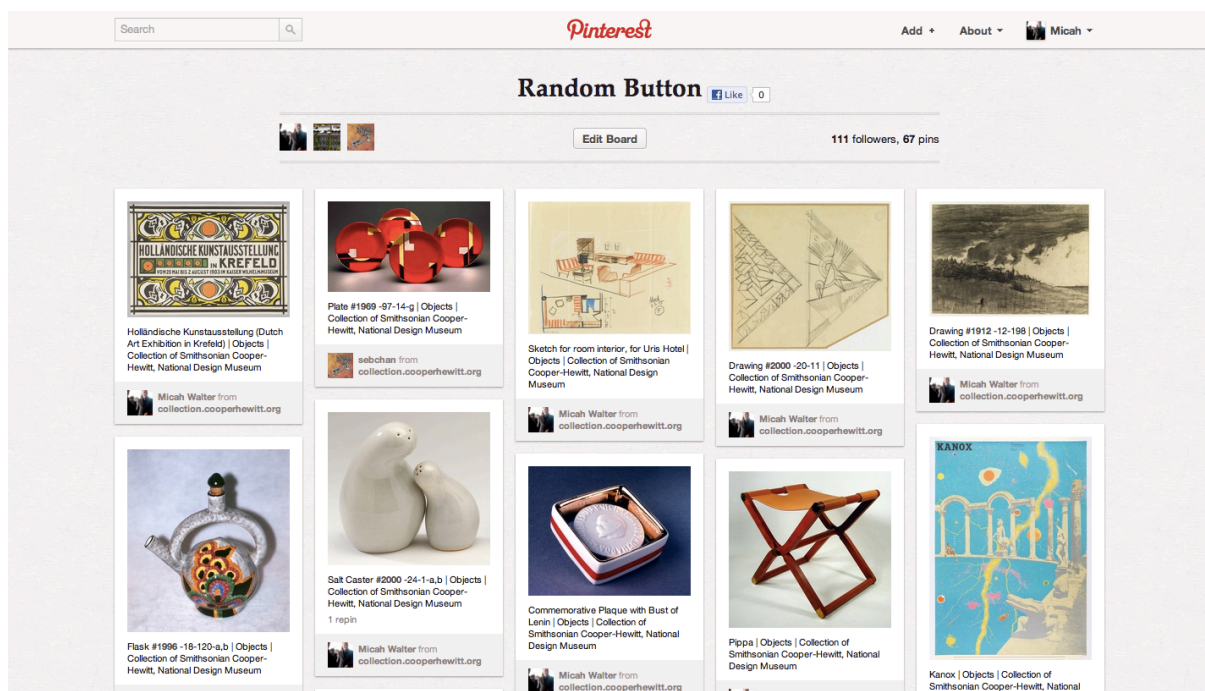
[Hide the details of this Wikipedia entry.](#)

*Do you have your own photos of this person? Are they online somewhere, like [Flickr](#) or [Instagram](#)? If so then then tag them with **ch:person=18535489** and we will connect ours to yours!*

We have many categorical methods of browsing our collection now. But I have to say, my favorite is still the Random images on the home page. In fact I started a Pinterest board called “[Random Button](http://pinterest.com/micahwalter/random-button/)” to capture a few of my favorites. There are fun things, famous things, odd things and downright ugly things, formerly hidden away from sight, but now easy to discover, serendipitously via the random button!

There is much more to talk about, but I'll stop here for now. Aaron, the lead developer on the project is working on a much more in depth and technical post about how he engineered the site and was able to bring us to a public alpha in less than three months!

So stay tuned.... and [get exploring](http://collection.cooperhewitt.org) <http://collection.cooperhewitt.org>.



Micah Walter from
collection.cooperhewitt.org



Jenny Lind Paper Doll Costume |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

Micah Walter from
collection.cooperhewitt.org



Gloves #1947-47-1-a,b | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



Enamel Decoration and Tinder Cord |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

Micah Walter from
collection.cooperhewitt.org



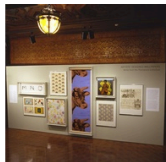
Citibank Withdrawal Slip Design |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

Micah Walter from
collection.cooperhewitt.org



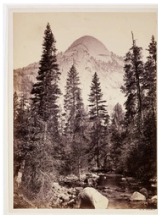
Armchair #1977-105-1 | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



Mural Scrolls | Images | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



North Dome, Yosemite | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



Weaver's Thesis Book #1958-30-1 |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

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collection.cooperhewitt.org



Radio Nurse | Objects | Collection of
Smithsonian Cooper-Hewitt, National
Design Museum

Micah Walter from
collection.cooperhewitt.org



Mexicotton Solid | Objects | Collection
of Smithsonian Cooper-Hewitt, National
Design Museum

Micah Walter from
collection.cooperhewitt.org



Cap #1951-105-32 | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



"Mezzadro" | Objects | Collection of
Smithsonian Cooper-Hewitt, National
Design Museum



Torah Pointer #1952-120-2 | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
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Sidewall #1998-66-5 | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



Mini_motion | Objects | Collection of
Smithsonian Cooper-Hewitt, National
Design Museum

Micah Walter from
collection.cooperhewitt.org



Element three | Objects | Collection of
Smithsonian Cooper-Hewitt, National
Design Museum

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Micah Walter from
collection.cooperhewitt.org



Talking Heads: Remain in Light |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

Micah Walter from
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No. 670 (chair), No. 671 (ottoman) |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

Micah Walter from
collection.cooperhewitt.org



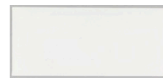
Camera #1999-53-20-a/c | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



Signature Collection, "Picnic Flatware" |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

Micah Walter from
collection.cooperhewitt.org



Visitors Center Columbus, Indiana |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

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Milverel | Objects | Collection of
Smithsonian Cooper-Hewitt, National
Design Museum

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Design Museum

Micah Walter from
collection.cooperhewitt.org



Tractor, Model 720, front and side
screens, for John Deere | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



Dinnerware as Fish Aquarium | Objects
| Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



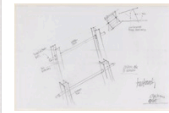
Figure #1904-20-20 | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



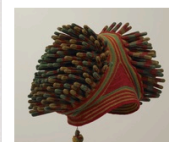
Reclining Uzbek Man | Objects |
Collection of Smithsonian Cooper-
Hewitt, National Design Museum

Micah Walter from
collection.cooperhewitt.org



Design for Chicken Point Cabin,
Hayden Lake, Idaho: Axel Window |
Objects | Collection of Smithsonian
Cooper-Hewitt, National Design
Museum

Micah Walter from
collection.cooperhewitt.org



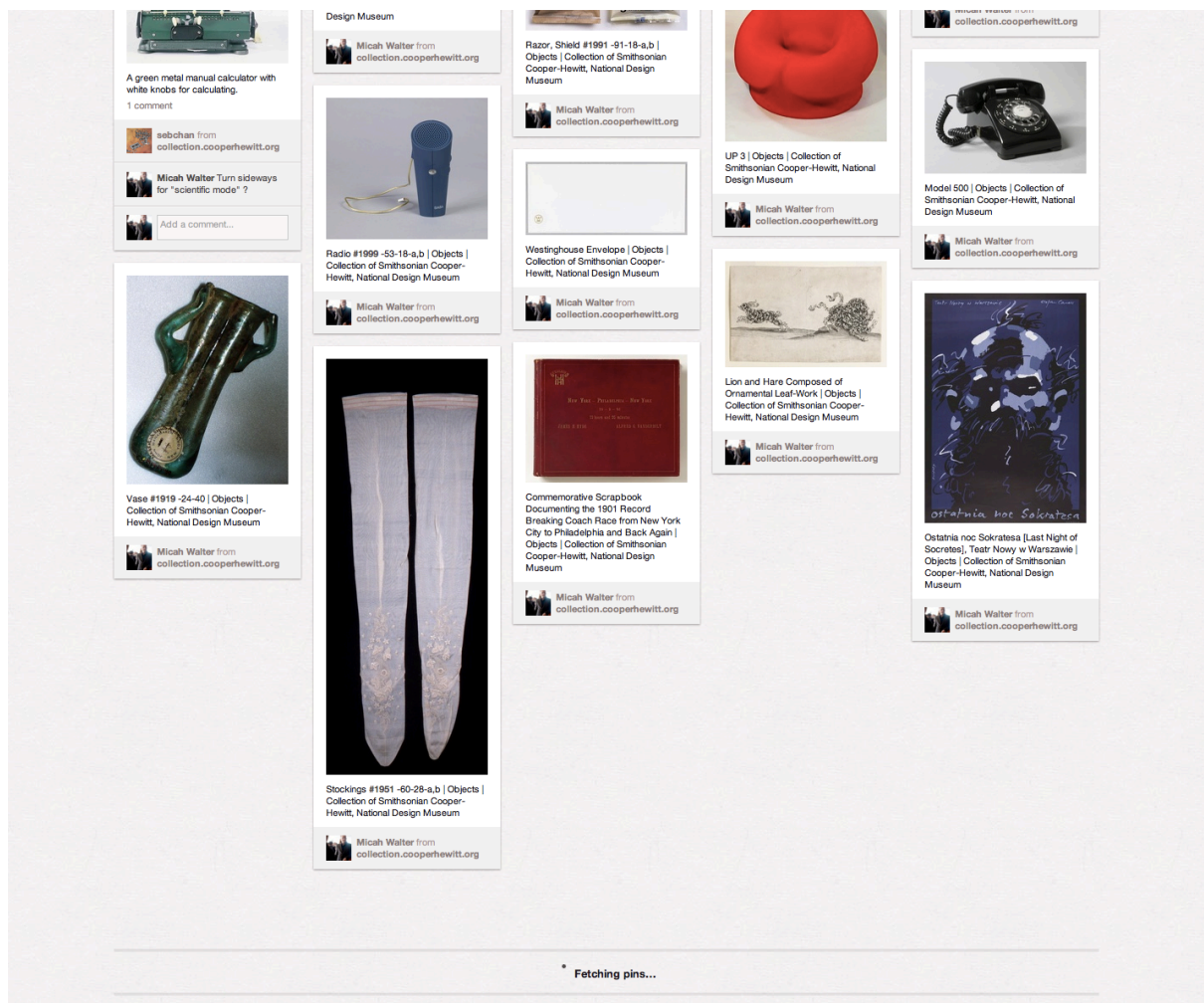
Hat #2003-3-1 | Objects | Collection of
Smithsonian Cooper-Hewitt, National
Design Museum

Micah Walter from
collection.cooperhewitt.org



Natural Sound Stereo Cassette Deck
TC-8000 | Objects | Collection of
Smithsonian Cooper-Hewitt, National
Design Museum

Micah Walter from



<http://pinterest.com/micahwalter/random-button/>

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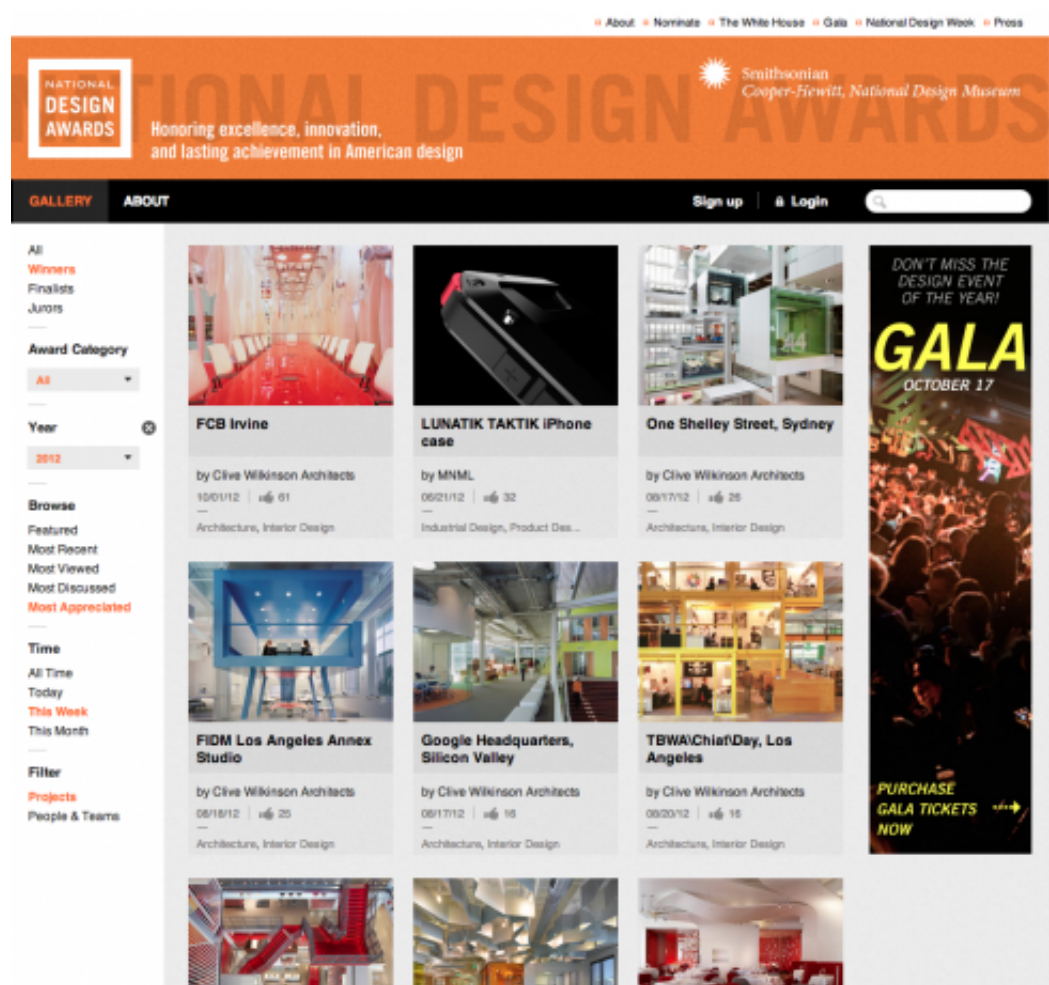
Being 'Of The Web': now with Behance, Lanyrd & Art.sy

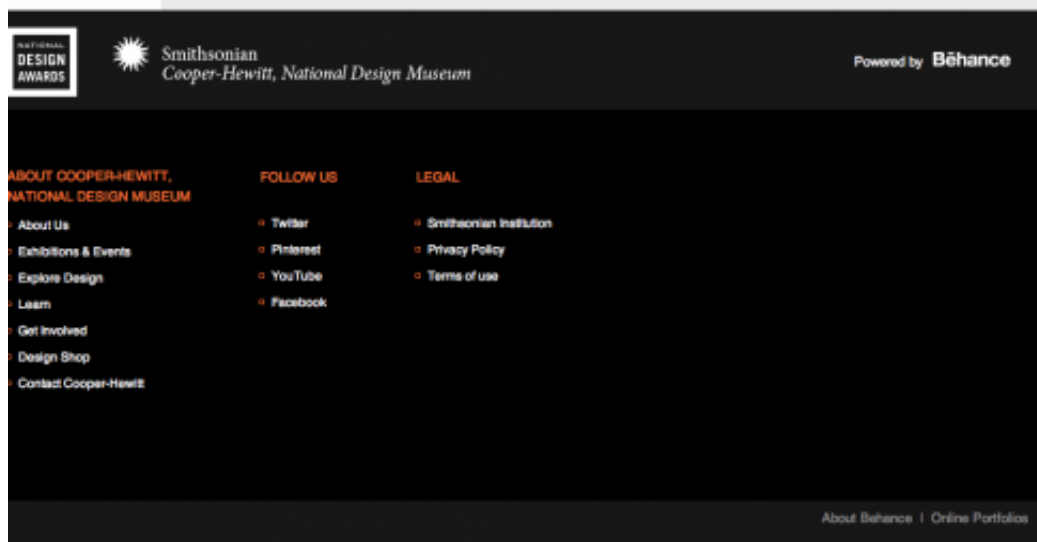
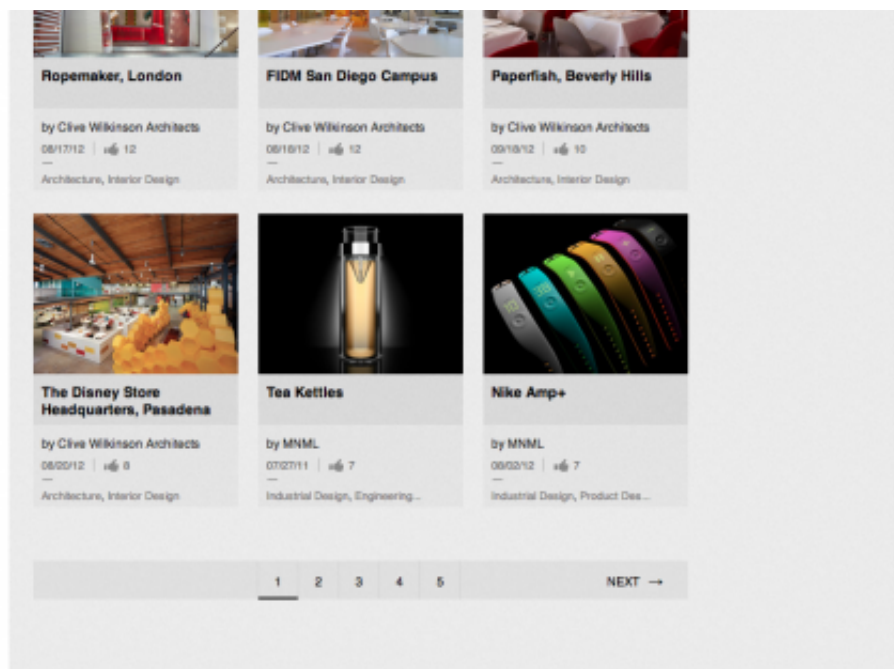
Last week we talked about our philosophy of being '[of the web](http://labs.cooperhewitt.org/2012/online-collection-alpha/)', rather than just having the museum 'on the web'.

And so onto our latest partnerships, our stepping stones to make this a reality.

Behance

We've worked with [Behance](http://www.behance.net), to deepen the exposure of the National Design Award winners through the creation of a [branded gallery](http://ndagallery.cooperhewitt.org) on their platform.





<http://nda->

gallery.cooperhewitt.org

Rather than the museum making (another) microsite, Behance offers us a way to put the award winners into one of the largest professional social networks *used by designers themselves*. You can now browse projects by the winners, finalists and jurors – all within their platform.

Behance brings huge exposure to the winners, and the awards, and we're expecting that many more people find out about the awards than would ever have made it to our own site.

Lanyrd

And we've partnered with event calendaring [Lanyrd](http://lanyrd.com) http://lanyrd.com to highlight design events across America this month. Lanyrd offers a [branded site for National Design Week](http://ndw.lanyrd.com) http://ndw.lanyrd.com, and, at the backend, has allowed us, in the words of Aaron Cope, 'to get out of the calendaring business' (which museums shouldn't ever be part of!). Aaron's also been able to whip up a nice little [mobile web app](http://ndw2012.cooperhewitt.org) http://ndw2012.cooperhewitt.org – helped by the normalisation of the data feed provided by Lanyrd. (App post soon!)

Art.sy

You already know we are one of the larger contributors to [Google Art Project](http://www.googleartproject.com/collection/cooper-hewitt-national-design-museum/) http://www.googleartproject.com/collection/cooper-hewitt-national-design-museum/, and now we've also contributed to another pan-institutional project, [Art.sy](http://art.sy) http://art.sy. I'm excited by this because it challenges Art.sy's '[art genome](http://theartgenomeproject.tumblr.com)' http://theartgenomeproject.tumblr.com tools to deal with a design collection. And also because the site itself very publicly reveals the porous boundaries between the art market and the art museum.

Read the [New York Times piece on Art.sy](http://www.nytimes.com/2012/10/09/arts/design/artsy-is-mapping-the-world-of-art-on-the-web.html?smid=pl-share&pagewanted=all) http://www.nytimes.com/2012/10/09/arts/design/artsy-is-mapping-the-world-of-art-on-the-web.html?smid=pl-share&pagewanted=all which quite nicely demonstrates the subtle rift between the old (on the web) and new (of the web) worlds.

And . . .

And finally, you might notice that if you happen put the URL of one of our collection objects in a tweet, you get a nice little 'expanded' bit of information, complete with object thumbnail and @cooperhewitt attribution! That was Aaron's Friday afternoon treat. Next stop is a custom short URL to make that whole process a bit nicer on the eyes. Cool, huh?



This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged artsy* <http://labs.cooperhewitt.org/tag/artsy/>, *behance* <http://labs.cooperhewitt.org/tag/behance/>, *lanyrd* <http://labs.cooperhewitt.org/tag/lanyrd/>, *network effects* <http://labs.cooperhewitt.org/tag/network-effects/>, *partnerships* <http://labs.cooperhewitt.org/tag/partnerships/>, *twitter* <http://labs.cooperhewitt.org/tag/twitter/> *on October 8, 2012* [<http://labs.cooperhewitt.org/2012/of-web-behance-lanyrd-art-sy/>] *by Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

Rebooting Museum Publishing

For over two years, much to many people's surprise, Cooper Union Museum's and Cooper-Hewitt's historical publications have been publicly accessible via the [Internet](#)

[Archive](#) <http://archive.org/search.php?query=creator%3A%22Cooper-Hewitt%20Museum%22%20OR%20%22Cooper%20Union%20Museum%22> . Many of these publications are rare and in some cases, the only known existing copy is held in our [National Design Library](#) <http://www.cooperhewitt.org/collections/library> who worked hard to have them digitized. Sadly, these long digitized Museum publications have languished without much visibility.

In fact, in *The New York Times*' 11/26/12 piece "[The Art World, Blurred](#)" <http://www.nytimes.com/2012/10/28/arts/artsspecial/boundaries-blur-at-art-showcases.html?pagewanted=all> , Carol Vogel identifies the "graveyard of out-of-print books" that is rapidly haunting museums. In shout-outs to these savvy go-getters, she cheers for a long list of online museum initiatives at the Metropolitan Museum of Art, the Walker Art Center in Minneapolis, LACMA, and the Art Institute of Chicago, to name a few. Can anyone say Cooper-Hewitt?

Thankfully, all that is changing!

With our [Historical Publications](#) <http://www.cooperhewitt.org/publications/historical> section, this material is now easily accessible and can be explored right on the page without leaving the site. In addition, integrating these publications on our site provides a growing connection with the Museum collection and exhibition archive, while also establishing an invaluable foundation as the Museum moves into new publishing territory. Expect to see rich connections to and from our evolving [Online Collections](#) <mailto:http://collection.cooperhewitt.org> soon

Publishing is experiencing a renaissance at Cooper-Hewitt, led by the newly-formed Cross-Platform Publishing team now part of Digital and Emerging Media. We are particularly excited about our new imprint, DesignFile, which was created to publish ebooks on design research and writing. *Design Cult*, a collection of essays by design critic and National Design Award winner, Steven Heller, will be one of three DesignFile releases set to launch in January 2013. Look for it in epub , iBooks, and Kindle. Spoiler alert: there will be an upcoming post offering some cool insights from our in-house graphic designer, Katie, about the process of designing covers for ebooks vs. print.

We have more projects underway—including a rethinking of publishing workflows much in the vein of Auckland Museum’s ‘COPE’ strategy (create once publish everywhere).

In the meantime, check out one of our favorite historical pubs, the 1941 [A Brief Introduction to the Museum’s Facilities](http://www.cooperhewitt.org/publications/brief-introduction-museums-facilities), which is a fascinating glimpse into both mid-20th-century design thinking and the museum experience.

Pam Horn & Sara Rubinow

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/>, *Publishing* <http://labs.cooperhewitt.org/category/publishing/> *and tagged COPE* <http://labs.cooperhewitt.org/tag/cope/>, *ebooks* <http://labs.cooperhewitt.org/tag/ebooks/>, *iBooks* <http://labs.cooperhewitt.org/tag/ibooks/>, *Kindle* <http://labs.cooperhewitt.org/tag/kindle/>, *The New York Times* <http://labs.cooperhewitt.org/tag/the-new-york-times/> *on November 28, 2012* [<http://labs.cooperhewitt.org/2012/rebooting-museum-publishing/>] *by pam* <http://labs.cooperhewitt.org/author/pam/>.

Guest post: Notes from hacking on the Cooper-Hewitt collections API

A couple of days ago the Labs hosted a guest to play with our API.

Over to Frankie to explain what he did and the challenges he faced. As it turns out, there's a lot you can get done in a day.

—

Hi, I'm Frankie Roberto. I used to work at the [Science Museum](http://www.sciencemuseum.org.uk) in London, where I produced their web projects. I've also worked with museums such as the British Museum whilst at digital agency Rattle. One theme running through all of this time is the importance of data, and the things that it can enable.

So when I learnt that the Cooper-Hewitt Museum had released a 'public alpha' of their collections database, the idea of spending a day playing with the data whilst in New York (on holiday!) seemed like it'd be fun. Plus, I get to hang out with Seb & co.

I [signed up for an API account](http://collection.cooperhewitt.org/api/) ahead of time. This does feel like a bit of hurdle. Because the API uses [OAuth 2.0](https://collection.cooperhewitt.org/api/oauth2/), as well as creating an account, you then have to create an application, and then authorise yourself against your own application in order to get an access token which ultimately grants you access to the data. This makes more sense for situations where you want to get access to another user's data (e.g. let's say that users can bookmark favourite objects and you want to display a visualisation of them). For accessing public data it's a little overkill. Thankfully the web interface makes it all fairly straightforward.

Ideally, I think it'd be simpler and more developer-friendly not to require API keys at all, and instead to simply allow anyone to retrieve the data with a simple GET request. These can even be tried out in a browser – a common convention is to simply add '.json' on the end of URLs for JSON views. This also lets you use HTTP-level caching, which works at the browser end, the server end and proxies in the middle, keeping things speedy. On the downside, this would make it harder to monitor API usage.

Authentication quibbles aside, once set up I could begin querying the data.

I came to the Cooper-Hewitt knowing very little about the institution other than that it is a design museum. My expectations then were that the collection would be a treasure trove of great design from the past century – things like the Henry vacuum cleaner or the Juicy Salif lemon squeezer by Philippe Starck. In short: '[design classics](http://www.phaidon.com/store/design/phaidon-design-classics-9780714843995/)' <http://www.phaidon.com/store/design/phaidon-design-classics-9780714843995/>'.

'Classic' is a funny word, after abused as a euphemism for old and obsolete, but when applied to design I think it implies quality, innovation, and timelessness – things you might still use today (hence the community around maintaining 'classic cars').

My challenge then was to see if, for a given type of thing, I could show the 'classic' versions of that thing from the Cooper-Hewitt collection.

To kick off, I looked at the list of 'types' in the collection. There are 2,998 of these, and they are for the most part simple & recognisable words or short phrases – things like 'teapot' and 'chair'. The data is a little messy, also including more specific things like 'side chair' and 'teapot and lid', but, y'know, [it's good enough for now](http://www.freshandnew.org/2012/08/museum-datasets-un-comprehensive-ness-data-mining/) <http://www.freshandnew.org/2012/08/museum-datasets-un-comprehensive-ness-data-mining/>.

I could have retrieved the entire list of types through the API, but as you only get a small bunch at a time, this would have required 'paging' through the results with multiple requests. Not too tricky, but rather than coding the logic for this, it was a lot simpler to just import the full list from the [CSV dump on GitHub](https://github.com/cooperhewitt/collection) <https://github.com/cooperhewitt/collection>.

The next step was to retrieve a list of objects for each type.

Unfortunately, this didn't actually seem to be possible using the API (yet). So I went back to GitHub and used the CSV dump of all objects. This contains around a 100,000 objects. Not a huge amount, but with a tip-off from Seb, I realised that I was actually only interested in the objects from the '[product design](https://collection.cooperhewitt.org/departments/35347497/)' department <https://collection.cooperhewitt.org/departments/35347497/> – a much smaller list of just 19,848 objects (the rest seem to be mainly drawings and textiles).

With these objects imported, the next step was to match the objects with the types.

This data didn't seem to be in the CSV file – and it isn't returned in the API response for object details either (an accidental omission, I think). Stuck, I turned to Seb's team, and soon learned that what I thought was the object 'name' was actually a concatenation of the object's type and age, separated by a comma. So, I could get an object's type by simply reversing the process (slight gotcha: remember to ignore case).

At this point I had a database of objects by type, but no images – which for most purposes are pretty crucial.

Ideally, links to the images would've been in the CSV dump. Instead, I'd have to query the API for each object and collect the links. Objects can have multiple images, but I only really need the main one, which is designated the 'primary' image in the API. Oddly, a good proportion of the objects had no primary image, but did have one or more non-primary images. In these cases, I'd just select the first image.

Script written, I started hitting the API. With 19,848 requests to make, I figured this'd take some time. About a quarter of the way through, I realised that the same data was also available in GitHub, and this could be queried by requesting the 'raw' version of the URLs (constructed by splitting the object id into bunches of three digits). So I modified my script to do just that, and set it going, this time starting from the bottom of my list of objects and working up. The GitHub-querying script ran a little faster than the Cooper-Hewitt API (probably not too surprising), and so both scripts 'met' somewhere in the middle of the list.

The results of this were that I had images for roughly a quarter of the product design objects, with around 5,000. This seems like quite a lot, but given that lots of these are rather obscure things like 'matchsafes', the collection actually isn't that big, and is rather patchy.

There's a limit to how many products you can actually collect (and store), of course, and so I'm not suggesting that the museum go on an acquiring spree. But I do wonder whether, to present a good experience online, it might be wise to try and merge in some external product design databases to fill in the holes.

By the time I'd assembled all the data, I didn't have too much time to consider how to present the 'classic' products from among the collection.

Ideally, I think this is something that the museum should expose its expertise in. It can be

tempting for museums to pretend that all objects have equal value, but in reality there are always some objects that are considered better, more unique, or in this case 'more classic' than others. Museum curators are ideally placed to make these judgement calls (and to explain them). For mass-manufactured design objects, this is arguably more important than collecting them in the first place (it's unlikely you'd not be able to find an [original iPod](https://collection.cooperhewitt.org/objects/18733525/) <https://collection.cooperhewitt.org/objects/18733525/> for an exhibition if you needed one).

Ideas we came up with amongst the team were to try and look up the price of the object on eBay (price isn't a perfect indicator of design value, but might be a reasonable proxy), or to try and see whether other museums, like the V&A, had also collected the same object.

In the end, I went with a simple crowd-sourcing model. Initially three random objects from each type are picked to be shown as the 'classic' ones (3 feels like a good number), with the others shown as smaller thumbnails below. You can then very simply vote objects up or down.

[Back](#)

The 3 classic ewers



Ewer, 1919-24-80, 17th-18th century

This isn't that classic!



Ewer, 1919-24-82, 17th-18th century

This isn't that classic!

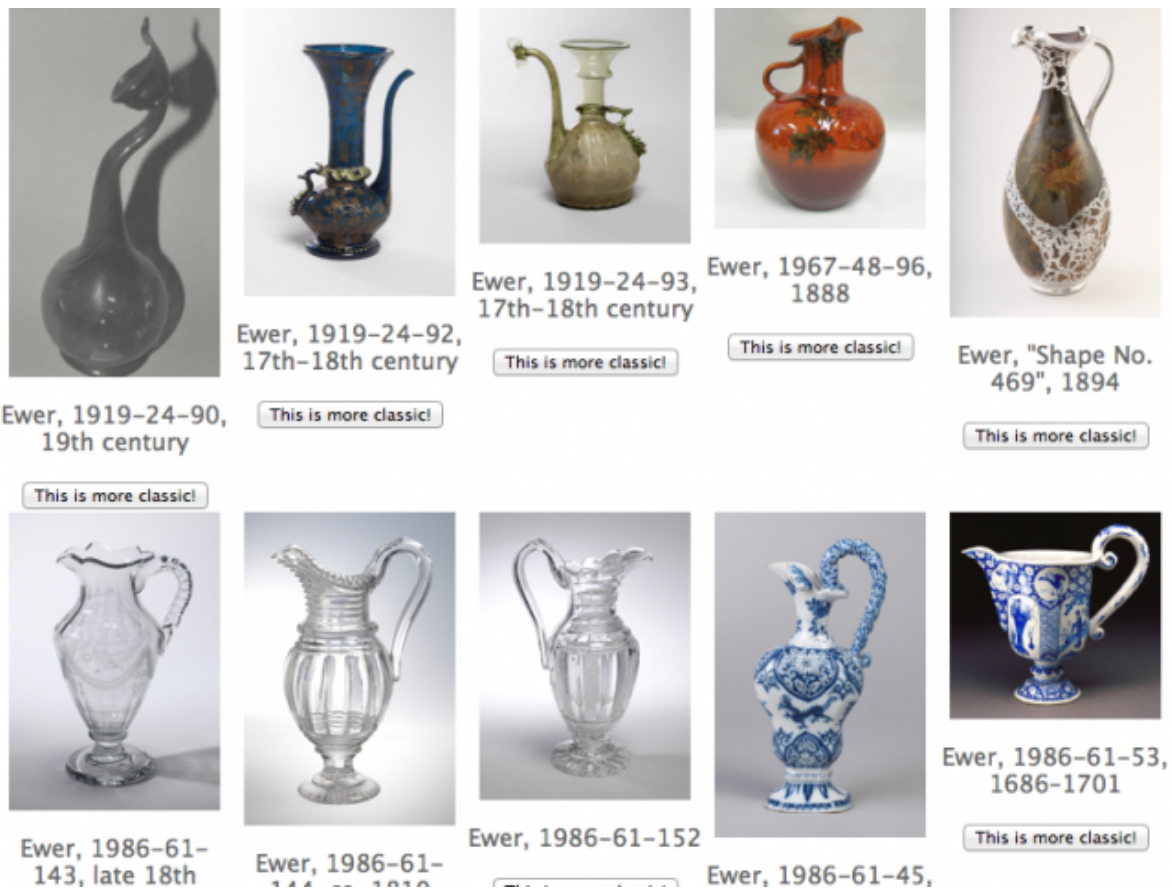


Ewer, 1919-24-86, 17th-18th century

This isn't that classic!

The other ewers





The result of this very simple demo is online at <http://designclassics.herokuapp.com> <http://designclassics.herokuapp.com> – feel free to explore (and vote on the objects).

Thanks to the Cooper-Hewitt for hosting me for the day. I look forward to seeing how the 'alpha' collections database develops into the 'beta', and then the full launch.

—

If you are an interaction design or digital humanities student, or just a nerd with a bent for playing with museum collections, and you feel like hanging out for a day or two in the Labs to make things then we'd love to have you over.

Drop us a line and we'll make it happen.

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged API* <http://labs.cooperhewitt.org/tag/api/>, *collections* <http://labs.cooperhewitt.org/tag/collections/>, *residents* <http://labs.cooperhewitt.org/tag/residents/>

dents/ *on November 29, 2012* [<http://labs.cooperhewitt.org/2012/guest-post-notes-hacking-cooper-hewitt-collections-api/>]
by frankier <http://labs.cooperhewitt.org/author/frankier/>.

A proposal: Glossaries (dot json)



<http://www.flickr.com/photos/straup/7926228468/>

Early in the development cycle of [the new Cooper-Hewitt collections website](http://collection.cooperhewitt.org/) <http://collection.cooperhewitt.org/> we decided that we wanted to define as many concordances, as possible, between our collection and the stuff belonging to other institutions.

We're going to save an in-depth discussion of the specifics behind those efforts for another blog post except to say that the first step in building those concordances was harvesting other people's data (through public data dumps or their APIs).

Defining equivalencies is still more of an art than a science and so having a local copy of someone else's dataset is important for testing things out. A big part of that work is looking at someone else's data and asking yourself: *What does this field mean?* It's not a problem specific to APIs or datasets, either. Every time two people exchange a spreadsheet the same question is bound to pop up.

It's long been something of a holy grail of museums, and cultural heritage institutions, to imagine that we can define a common set of metadata standards that we will all use and unlock a magic (pony) world of cross-institutional search and understanding. The shortest possible retort to this idea is: *Yes, but no.*

We can (and should) try to standardize on those things that are common between institutions. However it is the differences – differences in responsibilities; in bias and interpretation; in technical infrastructure – that distinguish institutions from one another. One needs look no further than the myriad ways in which museum encode their collection data in API responses to see this reality made manifest.

I choose to believe that there are good and valid, and very specific, reasons why every institution does things a little differently and I don't want to change that. What I would like, however, is some guidance.

In the process of working with everyone else's data I wrote myself [a little tool](https://github.com/cooperhewitt/collection-tools/blob/master/bin/generate-glossary.py) https://github.com/cooperhewitt/collection-tools/blob/master/bin/generate-glossary.py that iterates over a directory of files and generates a "glossary" file. Something that I can use as a quick reference listing all the possible keys that a given API or data dump might define.

The glossary files began life as a tool to make my life a little easier and they have three simple rules:

- They are meant to be written by humans, in human-speak.
- They are meant to be read by humans, in human-speak.
- They are meant to be updated as time and circumstances permit.

That's it.

They are not meant to facilitate the autonomous [robot-readable world](http://berglondon.com/blog/2011/08/03/the-robot-readable-world/) http://berglondon.com/blog/2011/08/03/the-robot-readable-world/, at least not on their own. They are meant to be used in concert with humans be they researchers investigating another institution's collection or developers trying to make their collections hold hands with someone else's.

So, here's the proposal: What if we all published our own glossary files?

What is a glossary file?

Glossary files are just dictionaries of dictionaries, encoded as [JSON](http://www.json.org/) http://www.json.org/. There is nothing special about JSON other than that it currently does the best job at removing the most amount of markup required by machines to make sense of things, and is supported by just about every programming language out there. If someone comes up with something better it stands to reason that glossary files would use that instead.

You can see [a copy of the Cooper-Hewitt's glossary file for objects](https://github.com/cooperhewitt/collectection/blob/master/meta/objects-glossary.json) https://github.com/cooperhewitt/collectection/blob/master/meta/objects-glossary.json in our collection repository over on Github. *And yes, you would be correct in noting that it doesn't actually have any useful descriptive data in yet. One thing at a time.*

The parent dictionary contains keys which are the names of the properties in the data structure used by an institution. Nested properties are collapsed in to a string, using a dot notation. For example: `'images' : { 'b' : { 'width' : '715' } }` would become `'images.b.width'`.

The values are another dictionary with one required and two optional keys. They are:

description

This is a short text describing the key and how its values should be approached.

There is no expectation of *any* markup in text fields in a glossary file. Nothing is stopping you from adding markup but the explicit goal of glossary files is to be simpler than simple and to be the sort of thing that could be updated using nothing fancier than a text editor. It's probably better to rely on the magic of language rather than semantics.

notes

This is an optional list of short texts describing gotchas, edge cases, special considerations or anything else that doesn't need to go in the `description` field but is still relevant.

sameas

This is an optional list of pointers asserting that you (the person maintaining a glossary file) believe that your key is the same as someone else's. For example, the Cooper-Hewitt might say that our date field is the same as the Indianapolis Museum of Art's `creation_date` field.

There are two important things to remember about the `sameas` field:

- You (as the author) are only asserting things that *you* believe to be true. There is absolutely no requirement that you define `sameas` properties for all the fields in your glossary file. Think of these pointers as the icing on the cake, rather than the cake itself.
- There is currently no standard for how pointers should be encoded other than the stated goal of being “easy” for both humans and robots alike. The hope is that this will evolve through consensus – and working code.

For example, we might say our date field is the same as:

- `ima:creation_date`
- `x-urn:indianapolismuseumofart:creation_date`
- `http://www.imamuseum.org#creation_date`

My personal preference would be for the first notation (`ima:creation_date`) but that does mean we, as a community, need to agree on namespaces (the `ima:` prefix) or simply that we pledge to list them someplace where they can be looked up. Again, my personal preference is to start simple and see what happens.

The unstated rule with glossaries is that they also be easy enough to change without requiring a lot of time or heavy-lifting. If something fails that criteria that's probably a good indication it's best saved for a different project.

It's easy to consider both the possibilities and the pitfalls afforded by `sameas` pointers. They

are not going to solve every problem out there, by any means. On the other hand they feel like they might be a better than 80/20 solution (or at least forward motion) towards addressing the problem of equivalencies. It's really just about ensuring a separation of concerns. If we each commit to stating the things we believe to be true and to publishing those statements somewhere they can be found then, over time, we can use that data to tell us new and interesting things about our collections.

More importantly, between now and then – whatever “then” ends up looking like – we can still just get on with the work at hand.

Git(hub)

I mentioned that our glossary files are part of the [Cooper-Hewitt's collections metadata](https://github.com/cooperhewitt/collection/) repository on Github. Those files will always be included with the collections metadata but I am considering putting the canonical versions in their own repository.

This would allow other people, out there in the community, to contribute suggestions and fixes (“pull requests” in Git-speak) without having to download the entirety of our collection. As always with Git(hub) it offers a way for institutions to preserve the authority over the meaning of their collections and to give other institutions some degree of confidence in the things we are saying.

It also means that institutions will need to commit to taking seriously any pull requests that are submitted and tracking down the relevant people (inside the building) to approve or reject the changes. This is maybe not something we're all used to doing. We are not really wired, intellectually or institutionally, for dealing with the public pushing back on the things we publish.

But if we're being honest everyone knows that it's not only a thing seen distantly on the horizon but a thing approaching with a daunting (and some times terrifying) speed. We're going to have to figure out how to address that reality even if that just means better articulating the reasons why it's not something a given institution wants to do.

Which means that in addition to being a useful tool for researchers, developers and other people with directed goals glossaries can also act as a simple and safe device for putting

some of these ideas to the test and, hopefully, understand where the remaining bumpy bits lay.


Discuss!

This entry was posted in CH 3.0 <http://labs.cooperhewitt.org/category/ch-3-0/> *and tagged alpha* <http://labs.cooperhewitt.org/tag/alpha/> *on December 11, 2012* [<http://labs.cooperhewitt.org/2012/proposal-glossaries-dot-json/>] *by asc* <http://labs.cooperhewitt.org/author/asc/>.

'Discordances' – or the big to-do list

Yesterday Aaron rolled out a minor data update to the online collection. Along with this he also whipped up a 'anti-concordances' view for our people/company records. (Yes, for various reasons why are conflating people and companies/organisations). This allows us to show all the records we have that don't have exact matches in Wikipedia (and other sources).

Along with revealing that we don't yet have a good automated way of getting a 'best guess' of matches ([Marimekko Oy](http://collection.cooperhewitt.org/people/18045663/) <http://collection.cooperhewitt.org/people/18045663/> is the same as [Marimekko](http://en.wikipedia.org/wiki/Marimekko) <http://en.wikipedia.org/wiki/Marimekko>) without also getting matches for Canadian hockey players who happen to share a name with a designer, the list of 'discordances' is a good, finite problem that can be solved with more human eyes.

 **Smithsonian**
Cooper-Hewitt, National Design Museum

[We have lots of stuff](#) [SEARCH](#)

[countries](#) [departments](#) [exhibitions](#) [media](#) [people](#) [periods](#) [random](#) [roles](#) [types](#) [this is a public alpha](#)

People who we know are known unknowns from Wikipedia

We know who some of the people in our database are **at Wikipedia** but we don't know who 2,529 of them are / or there are too many choices!

- [Donald Deskey Associates](#) — we couldn't find anyone matching this person at Wikipedia
- [K.](#) — we haven't worked out a concordance for this person at Wikipedia yet
- [Maxwell & Co., S.A.](#) — we couldn't find anyone matching this person at Wikipedia
- [J. Grantil Company](#) — we couldn't find anyone matching this person at Wikipedia
- [Jean-Francois Cuvillies](#) — we haven't worked out a concordance for this person at Wikipedia yet
- [\(Unknown\) Olsson](#) — we couldn't find anyone matching this person at Wikipedia
- [The Schmitz-Horning Co.](#) — we couldn't find anyone matching this person at Wikipedia
- [Herman Miller Furniture Company](#) — we haven't worked out a concordance for this person at Wikipedia yet
- [Herman A. Elsberg](#) — we couldn't find anyone matching this person at Wikipedia
- [Giovanni Sebastiano Meyandi](#) — we couldn't find anyone matching this person at Wikipedia
- [Harold Spurrier Anderson](#) — we couldn't find anyone matching this person at Wikipedia
- [Unknown](#) — we haven't worked out a concordance for this person at Wikipedia yet

Concordances:

[All the people](#)
[Freebase](#)
[Indianapolis Museum of Art](#)
[Library of Congress](#)
[MoMA](#)
[Powellhouse Museum](#)
[Victoria and Albert Museum](#)
[Virtual International Authority File](#)
Wikipedia ← you are here

Do you know who one of these people is at Wikipedia? If you do, please fill out this form and let us know. Corrections won't be reflected immediately as we're still working through the mechanics of this process but all suggestions are welcome!

There is also a CSV file of all the people in our collection and their known concordances which is included as part of our public collections metadata



http://collec-

tion.cooperhewitt.org/people/not-from/wikipedia/

We are currently inviting people (you, for instance) to parse the list of non-matches and then tell us which ones should link to existing but differently-spelled Wikipedia pages, and which ones need to be created as new stubs in Wikipedia itself.

If you're feeling really bold you could even start those stubs yourself! You can even use our easy-to-insert Wikipedia citation snippet to reference anything in our collection from your newly created articles. You'll find the snippet tool at the bottom of each object and person/company record.

This entry was posted in Collection data <http://labs.cooperhewitt.org/category/collection-data/> *and tagged al-*

pha <http://labs.cooperhewitt.org/tag/alpha/>, *concordances* <http://labs.cooperhewitt.org/tag/concordances/>, *crowdsourc-*
ing <http://labs.cooperhewitt.org/tag/crowdsourcing/>, *glamwiki* <http://labs.cooperhewitt.org/tag/glamwiki/>,
wikipedia <http://labs.cooperhewitt.org/tag/wikipedia/> *on December 19, 2012* [<http://labs.cooperhewitt.org/2012/discor->
[dances-big-to-do-list/](http://labs.cooperhewitt.org/2012/discor-dances-big-to-do-list/)] *by Seb Chan* <http://labs.cooperhewitt.org/author/seb/>.

The O and the Minutiae of the Future-Now



"What's the o dot php?" [Nate](http://www.twitter.com/homebrewer/) asked.

We were sitting in a coffee shop in Melbourne and catching up on things because we still hadn't sorted out internet access at the hotel. We'd arrived the night before from Hobart, the capital of Tasmania, where we'd spent the day visiting the [Museum of Old and New Art](http://www.mona.net.au/) which is often just referred to as "MONA".

“Theo” is actually “The O <http://www.mona.net.au/theo/>” the name of the retrofitted iPod touch with custom software that MONA gives to every visitor when they enter the museum. “theo.php” is the URL that you’re emailed the following day which shows you all the stuff you saw during your visit.

It’s not a page that’s especially well-designed for looking at on your phone’s tiny web browser. You can do the pinchy-zoomy thing to move around the page and make the links big enough to click on but only at the cost of feeling vaguely annoyed and disappointed.

Links to individual works are loaded in-situ using Javascript so there are no permalinks (not even self-updating hash marks) or any way to share a link for a particular piece of art that you loved (or hated) with another person. Or even just yourself if you wanted to, say, bookmark it for later reference.

So, that’s not great. On the other hand: *Working code always wins.*

Few other museums have mustered up the ambition (not to mention the cash dollars) to do something on the scale of The O so until we do any criticism of the work that MONA *has done* needs to be cut down to size by running it through a filter that is equal parts envy and arm-chair quarterbacking.



The first thing I did when I got The O was remove the lanyard that you're supposed to use to drape the thing around your neck. Wearing it around your neck is meant to make the device easier to use which sounds like a classic engineering-as-philosophy excuse. It does actually make it easier to use but only because neither the hardware or the software are particularly well-suited for being shoved in to, and pulled out of, your back pocket.

The second thing I did was put the headphones I was given in the pocket of my jacket. I should have just given them back to the nice "front of house" person but a first visit to the lobby of MONA is a bit overwhelming. I couldn't tell you what the person who gave me The O said about the device. Mostly I was looking at the impressive glass staircase beyond the entrance and thinking: *Oh, it's an iPod. I can figure this out.*

The headphones seemed like overkill. Maybe that's me. I've never been much for audio tours and between The O and the headphones I was starting to feel like I might soon be wearing a fighter pilot's helmet complete with a built-in [heads-up display](https://en.wikipedia.org/wiki/Head-up_display). One of the nicer bits of The O is that every piece of art comes with a soundtrack; one or more songs that you can play while you contemplate a given work.

I might have been inclined to put the headphones on if The O sported a continuous partial soundtrack. Something that would just play by itself in the background and cut over, from one track to the next, as you moved around the museum.

Or a spoken narrative. That would be awesome and they don't necessarily need to be pre-recorded. I once walked the 30 minutes it takes to get from the [Detroit Institute of the Arts](http://www.dia.org/) to the city's downtown core listening to my phone's text-to-speech software read aloud a very long email from [my friend James](http://www.flickr.com/photos/antimega/6901825982/), so it's all in the realm of the possible.

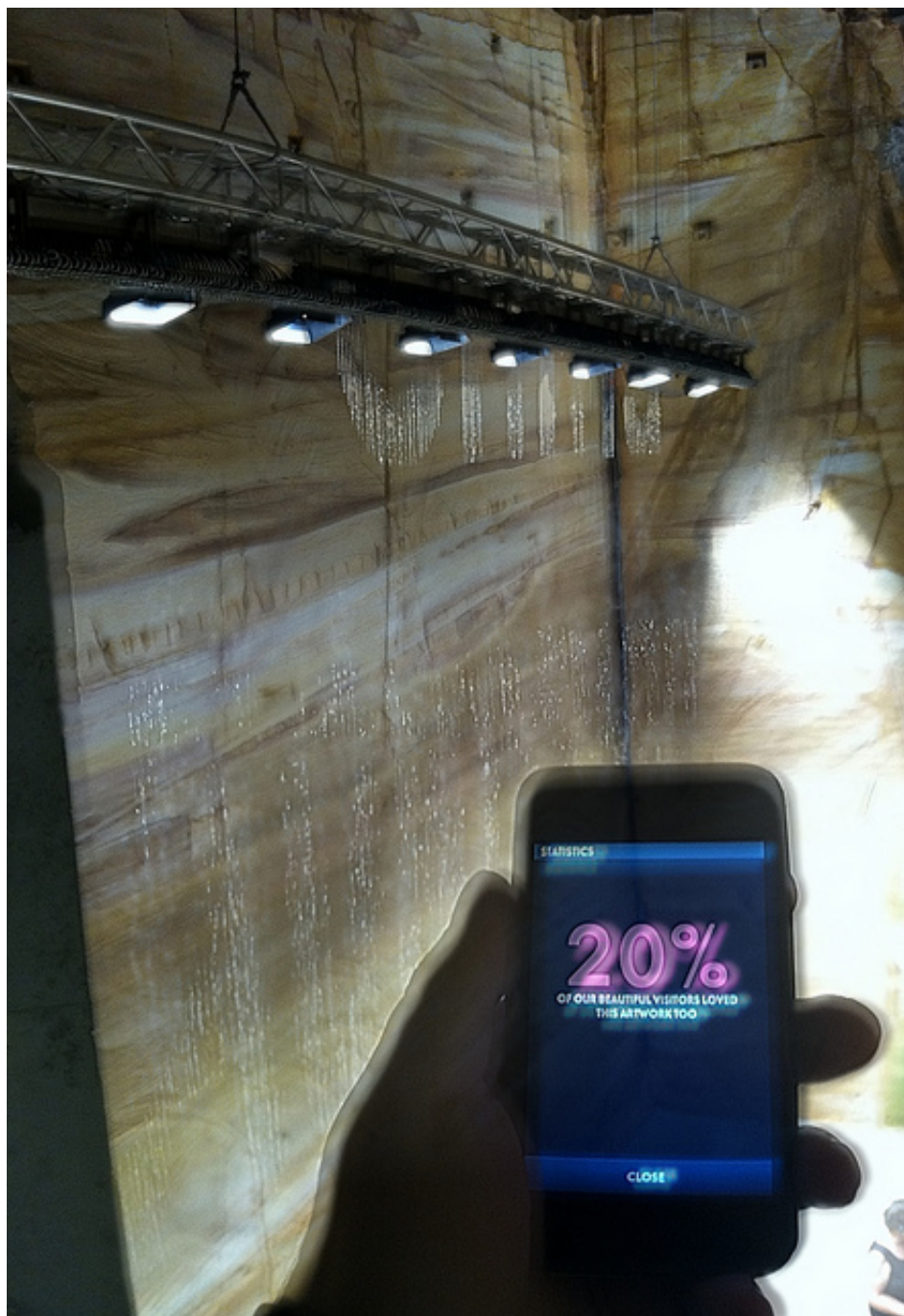
Instead it felt like more buttons to press.

The third thing I did, as we were walking down the stairs in to the museum itself, was ask why I couldn't take pictures with The O.

No one is discouraged from [taking photos in the museum](http://www.flickr.com/photos/tags/foursquare%3Avenue%3D4c1ac30beac020a1d5da43c2/) but it means fiddling with yet another device. Lots of people are going to want to use their fancy digital SLRs to take high(er) quality photos but most people are go-

ing to be perfectly happy with whatever this year's iPod camera can do. Especially if it makes things easier and especially-er if those photos can be tied to all the stuff that MONA knows about a work that's being photographed.

Managing photo uploads in a gallery would be a genuine engineering challenge (read: storage and bandwidth) but hardly an insurmountable one and the benefits would be pretty awesome. First of all, it demonstrates that a museum isn't blind to a reality where everyone walks around with a network-enabled camera, sharing things as they go. Secondly, if you're thinking about doing 3D digitization of your objects you could do a lot worse than stitching together all the photos that your visitors are taking.



One of the “crazier” aspects of MONA if you’re talking to museum professionals is the absence of wall labels. You know: Those pieces of cardboard stuck to the wall that tell you who the artist is, when a work was made and usually some overly polite interpretive text that is both too short to tell you anything of substance and too long to fit in a Twitter message.

MONA is full of wireless receivers and The O does some fancy-pants triangulation to figure out where you are in the building and only show you works that are nearby. It’s pretty clever,

really. It's also not very fast. Or rather it's only fast if you remember that our ability to do this *at all* is still kind of magic – but that gets old pretty quickly in a museum setting.

Maybe it was because the device isn't configured to stay on all the time and silently update its location as I moved around? After all, the iPods all come with big honking extra battery packs. Maybe it was because I kept turning the iPod off every time I stuck in my back pocket? Maybe it was because the app itself kept crashing and I had to wait for it to restart?

When it is working and you click on an individual piece you get a handsome photo of the thing you're looking at with five additional tabs for finding out more information. They are:

Summary

The basics like artist name, dimensions and a button to indicate you've seen the work, so that it will show up in the history of your (theo.php) tour around the museum.

There's also a "love" and "hate" button which is bit heavy-handed but still kind of charming. After you've indicated a choice there's some nice copy telling you where your ranking falls relative to everyone else's. I sort of wish that those stats were shown to you before you indicated a preference precisely to see how people would game the system. [I would totally](#) <https://twitter.com/thingsaarondoes> go on a tour of the most hated things on view at MONA.

Meanwhile, why can't I love or hate an artist?

Ideas

Or as I've started calling them: Fortune cookies. Short little pithy and fluffy aspirational dribblings of interpretation that are cornier than they are funny. They feel like throwaway comments that betray a lack of faith in the ability of visitors to be smart enough to figure things out on their own.

Art Wank

This felt like a deliberate provocation but it is [David Walsh's](http://monablog.net/category/david-walsh/) party so he can do whatever he wants. MONA is his personal art collection and he paid for

the whole thing, building included, out of pocket. I didn't read any of these texts if that's what you're wondering. They were too long to read standing up and too long to make me want to stare at a bright screen in an otherwise dark room.

Gonzo

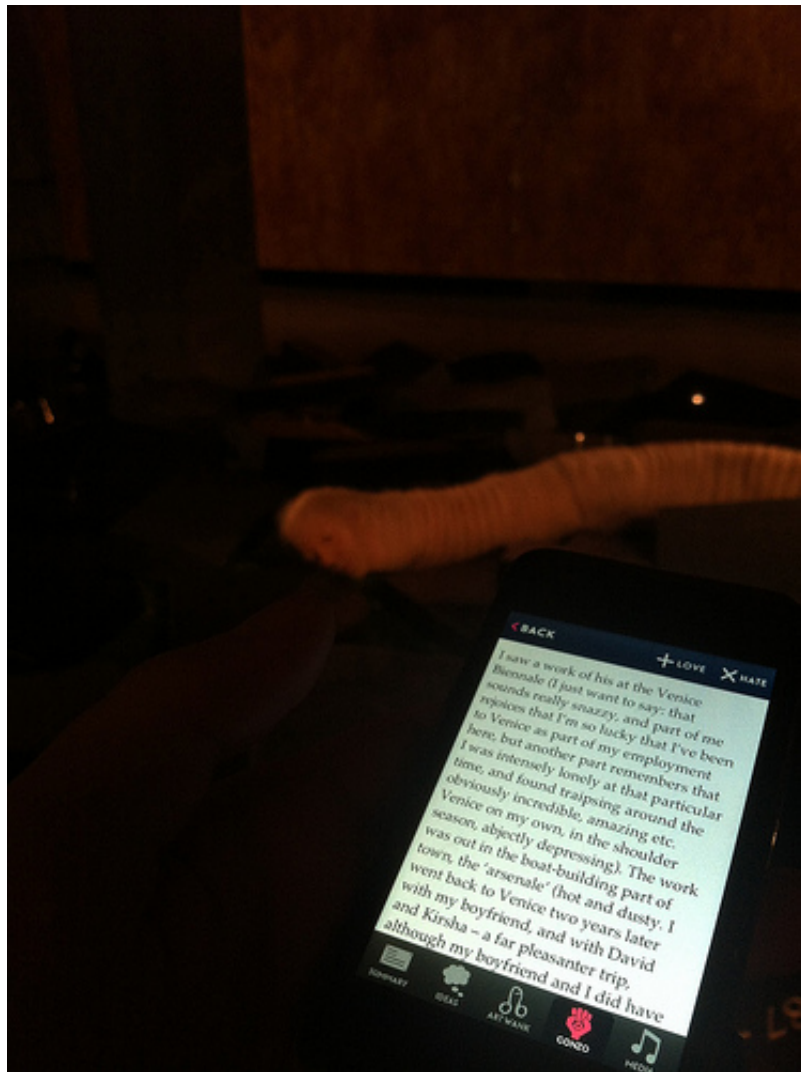
I wish this hadn't been labeled "[gonzo](http://muppet.wikia.com/wiki/Gonzo)". At the end of the day, though, I don't really care what it's called so long as it never goes away. **This is the best part of The O.** It leaves you feeling like there's some avenue for understanding why a given piece was collected by the museum. The tone is conversational and through it emerges all the wiggly and sometimes contradictory motives that went in to acquiring a piece.

It says: We probably know more of the shop-talk that surrounds a work of art but we are still human like you and our appreciation is something that we can, and want, to share with you. That we can hopefully make you appreciate how *we* fell in love with a work even if you think it's crap.

Call me crazy, but I'm just not sure what's "gonzo" about that. It seems like [minimal competence](http://laughingmeme.org/2010/05/18/minimal-competence-data-access-data-ownership-and-sharecropping/), really.

Media

So. Many. Buttons. *Do I have to press them all?!*



A few quibbles about the tabs:

- It's not clear when you're using the device whether the texts will be included in the summary version of your tour so I found myself literally taking pictures of the thing in order to ensure that I'd have a way to recall the text I was reading. This suggests something that could be made... better.
- The layout and formatting of the text is terrible. There's not really any excuse for this. The type is all smushed up together and the line heights are too small and the margins are non-existent. It all smells like some sort of default iOS NSTextWrapper handler from 2007. There is no shame in looking at what [Readability](http://www.readability.com/) or [Instapaper](https://www.instapaper.com/) are doing and just copying that.

- If I've gone to the trouble of clicking on one of the buttons for an artwork, or maybe clicking on a button and scrolling through some amount of a text, can that please count as having "viewed" a work? There are a bunch of things, like the [creepy-worm-body-artist-guy](http://monablog.net/2012/10/26/at-the-arsenale/) <http://monablog.net/2012/10/26/at-the-arsenale/>, that MONA doesn't think I've seen because I neglected to click the <I SEE YOU> button.

But it mostly works. Except when it doesn't. Every once in a while, some or all the items in a room (sometimes upwards of 30) will be bundled up in to a single listing that, when clicked, opens a nested list of individual objects which you then have to scroll through to find the thing you're looking for. In anger.

(pause)

It's kind of a terrible time to be making mobile apps or, rather, it's sort of the mobile equivalent of that time when people thought writing websites in Java was a good idea. Java is awesome for lots of things just maybe not websites, or anything that needs to change often. Native mobile apps feel the same way and there's the added burden that they are being aggressively used as a weapon by the companies (the vertical "[stacks](http://blog.brian-fitzgerald.net/the-rant-bruce-sterling-sxsw)" <http://blog.brian-fitzgerald.net/the-rant-bruce-sterling-sxsw>) that support them. See also: The long, sad history of vendor-specific authoring tools.

One of the things that seems to get lost in the discussion of "native" versus the "web" is that the web has not-quite-already-but-nearly won. Which is to say that *rendering engines* not browsers have won. Which means that HTML (and some combination of Javascript and CSS) has won. As has HTTP.

Almost.

HTTP has basically won as the network and transport layer for most things. Web-based rendering engines are still not really the equal of fussy and bespoke hardware and device-specific APIs when it comes to performance but everyone expects them to be soon, or to reach an acceptable threshold where the rest of it doesn't matter. Once that happens why would you ever go back?

But we're not there, yet. And tomorrow's future promises do little to help get things done today. That is our burden, working in the present.

So, if you ever meet anyone who was involved in building The O buy them a drink and thank them for being willing to step up and stab themselves in the face with the minutiae of the future-now. We are better for it.

Also, when was the last time you had oysters at a museum?



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